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3.2.2 Number of books and chapters in edited volumes/books published and papers published in national/ international conference proceedings per teacher during the year 2023-24

Sl. No.	Name of the teacher	Title of the book/chapters published	Title of the paper	Year of publication	ISBN/ISSN number of the proceeding	Affiliating Institute at the time of publication	Name of the publisher
1	SathiSaha	Higher Education Faculty for Mission Life	Lifestyle Changes for Environment and Sustainability	2024	978-81-964423-7-8	Krishna Chandra College	Star Press and Publications
2	Dr.SumitHowladar`	Contextualizing Suicide: Understanding Social Contract, Establishment and Agency		Jul-23	ISBN: 978-91-89764-25-5	Krishna Chandra College	Redshine Publication
3	ShabanaSalahuddin	Philosophical Interventions in Language, Literature and Critical Thinking	Analysis of the Idea of Justice in Plato's Philosophy	01.03. 2024	978-81-969016-1-5	Krishna Chandra College	Sarkar Library Publications
4	SalauddinShai kh	Public Policy and Indian Administration	Rashtrakortrik Niyog o OposaroneKen driyoRashtrorkortrik Commission ebongRajyaRashtrorkortrikCommissionerBhumika, ProshashoneS adharon o BisheshgyaBit orko	Jan-24	978-93-95355-37-7	Krishna Chandra College	Arambagh Book House
5	DR. HENA PAUL	DEVELOPMENT OF RHUTHENIUM COMPLEXES AS ANTICANCER		2023	ISBN: 978-91-89764-34-7		red' shine PUBLICATION , SWEDEN

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6	DR. LALAN CHANDRA MANDAL	Green Chemistry and Sustainable Technology : Photocatalysis for Environmental Remediation and Energy Production Recent Advances and Applications	Visible Light Mediated Click Chemistry	May-23	ISSN 2196-6982, ISSN 2196-6990 (electronic), ISBN 978-3-031-27706-1, ISBN 978-3-031-27707-8 (eBook)	Krishna Chandra College	Springer Nature Switzerland AG
7	DR. LALAN CHANDRA MANDAL	INTERNATIONAL PEER REVIEWED EDITED BOOK "Recent Trends in Multidisciplinary Research (Vol-8)	A brief analysis on findings of alkaloid architectures in Rauvolfia Tetraphylla L. (Apocynaceae)	Sep-23	ISBN: 978-91-89764-50-7	Krishna Chandra College	red' shine PUBLICATION , SWEDEN
	Dr. Shyamal Kr. Jash	Chapter 6. Nonconventional solvents for the isolation of natural products		2023	ISBN: 9783111243740	Krishna Chandra College	Berlin, Boston: De Gruyter
8	DR. HENA PAUL	DEVELOPMENT OF RHUTHENIUM COMPLEXES AS ANTICANCER AGENTS		2023	ISBN: 978-91-89764-34-7		red' shine PUBLICATION , SWEDEN
9	DR PALLAV JYOTI PAL	MULTIVARIATE CALCULUS		2024	ISBN-9766119777273		TECHNO WORLD
10	Arindam Ghosh	<i>Introduction to Poetry: A Comprehensive Study of Selected British Poetry (Elizabethan to Modern Period)</i>		2023	978-93-81231-94-4		The Book World
11	Arindam Ghosh	Introduction to prose A Comprehensive Study of Selected Essays And Short Stories (Elizabethan to Modern Period)		2024	978-93-81231-67-8		The Book World
12	Arindam Ghosh	Introduction to Functional English: A Comprehensive Companion		2024	978-93-81231-76-0		The Book World
13	Arindam Ghosh	English Literature: Texts, Contexts and Concepts, Edited by Dr Surendra Kumar Sao, Dr Anurag Ambasta	Joyce's Aesthetic Odyssey: Recontextualizing the Reader's	2023	978-93-92459-13-9		Malik and Sons

			Encounter with Finnegans Wake				
14	Arindam Ghosh	From Quills to Keyboards Critical Essays on English Literature Edited by Dr Protibha Mukherjee Sahukar Dr Surendra Kumar Sao	Disrupting the Borderlines of Real and Unreal through Cultural Syncretism: Reimagining History, Memory, and Tradition in Salman Rushdie's <i>The Enchantress of Florence</i>	2024	978-93-92459-36-8		Malik and Sons
15	Arindam Ghosh	Writers of Indian Diaspora Edited by Bijender Singh, Protibha Mukherjee Sahukar and Surendra Kumar Sao	Hearts at the Helm of Havoc: A Literary Exploration of Communal Strife in Shashi Tharoor's <i>Riot: A Love Story</i>	2024	978-1-0364-1016-2		Cambridge Scholars Publishing
16	Arindam Ghosh	<i>Introduction to Poetry: A Comprehensive Study of Selected British Poetry (Elizabethan to Modern Period)</i>		2023	978-93-81231-94-4		The Book World

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INDIA'S G20 PRESIDENCY

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Lifestyle Changes for Environment and Sustainability

Sathi Saha

Introduction

The negative impacts of human activity on the environment have become a major source of worry for the international community in recent decades. Climate change, biodiversity loss, air and water pollution, and resource depletion are just a few of the concerns that have highlighted the need for urgent and coordinated measures to achieve environmental sustainability. Although institutional frameworks, technical advancements, and legislative initiatives are crucial in tackling these issues, the importance of individual and group lifestyle changes cannot be understated. It is crucial to investigate how individual and societal behaviour might change in order to lessen the effects of the environment, given the growing awareness of the urgent threats posed by climate change, resource depletion, and ecological dilapidation. By using information from reliable sources, I'll try to explore many aspects of lifestyle changes that support environmental sustainability in this article and emphasize the vital connection between such changes and the more general idea of sustainable development.

The Group of Twenty (G20) presidency is presently being held by India, and the final summit will be held in November 2023 in New Delhi. India officially took up the G20 presidency

in December of the previous year, and is expected to continue in that role through November 30, 2023. India is carefully using G20 gatherings all throughout the country to promote the guiding principle of "Vasudhaiva Kutumbakam," which translates to "One Earth, One Family, One Future." The key areas of importance for India during its presidency are climate finance and technology, as well as the crucial goal of enabling fair energy transitions for poor countries worldwide. India intends to use the tenets of LiFe, a behavior-oriented movement built upon the foundation of the nation's venerable sustainable traditions, as stated by the Ministry of External Affairs (MEA), in order to gently influence consumers and subsequently markets towards the adoption of environmentally-conscious practices.

What is Sustainable Development

With the dual goals of achieving human development objectives while simultaneously assisting natural systems in providing vital resources and ecosystem services to mankind, sustainable development acts as a guiding concept. The ultimate goal is to create a social structure where resources and living circumstances work together to meet human needs in a way that preserves the stability and balance of our planet's ecology. The study *Our Common Future*, sometimes known as the "Brundtland Report," was published in 1987 by the United Nations World Commission on Environment and Development.

The definition of "sustainable development" from a previous study was included and is now often used, is stated below-

"A development that is sustainable is one that satisfies current requirements without endangering the capacity of future generations to satisfy their own needs. It contains two fundamental ideas: the idea of 'needs', especially the basic needs of the world's poor, to which top priority should be given; and the notion that environmental sustainability is constrained by the state of technology and social

organization". Thus, sustainable development seeks to strike a balance between social welfare, environmental preservation, and economic growth.

Sustainable Ways of Living

Sustainable lifestyles represent a crucial nexus where individual decisions closely intertwine with the greater goals of environmental resilience and socio-economic growth. This paradigm emphasizes the need to coordinate human activity and consumption patterns in a balance with natural systems that will support both short-term and long-term existence. The following are some approaches that may be used to create and adopt sustainable lifestyles:

Sustainable Waste Management

The "Ecological Footprint" is a metric that measures the impact of human actions on the area of biologically productive land and water required for producing consumed goods and accommodating the resulting waste. Waste is a major concern within the realm of people's lifestyles and is quantifiable through this metric. In order to address this issue, it is essential for the general public to start domestic activities for the collection of recyclable materials (Kindred Association, 1994). A system of collecting recyclables that may be recycled or reused, such as paper, plastic, glass, metals, and organics, is known as a selective collection. The Voluntary Simplicity Movement, a diverse social movement made up of people who reject consumerism and uphold the notion that humanity can achieve a higher quality of life through sustainable alternatives (Grisby, 2004; Alexander, 2009; Ussher and Alexander, 2012), offers people the choice to adopt a variety of practises. These scholars point out that there are workable sustainable solutions that individuals can take on, such as reducing overall material consumption, mending damaged items or clothing rather than replacing them right away, choosing eco-friendly bags over plastic ones when shopping, buying used clothing, advocating for changes

in governmental environmental policy, and turning food waste into worm farms or compost bins.

Sustainable Water Management

Water management is a major concern in both rich and developing countries, as civilization is constantly impacted by ongoing scarcity and subpar treatment. Water limitations are necessary during times of drought because the effects of poor water management are felt in many sectors of human existence (Asano and Jimenez, 2008). Despite the complexity of managing water resources, there are simple individual activities that can improve the environmental situation. These include building individual water tanks for usage, such as toilet flushing and garden irrigation, and implementing water reuse practises inside residences. Additional tactics include taking shorter showers, cleaning automobiles on grass instead of pavement, and choosing to brush rather than hose off dirt (Asano and Jiménez, 2008). Water rationing and recycling are increasingly necessary as the world's population grows in order to protect freshwater supplies, maintain environmental integrity, and raise water quality standards (Asano and Jiménez, 2008). In Rouse Hill, New South Wales, an innovative project that recycles water for home uses such as toilet flushing, garden watering, and car cleaning came to fruition. Over 15,000 households are being served with recycled water through this programme, which was launched in August 2001 (Habel and Zachos, 2011).

Sustainable Use of Energy

In addition to being a key contributor to economic expansion, energy production plays a crucial role in meeting our most basic demands, including those related to refrigeration, cleaning, and online browsing. The complex interaction between energy production and pollution is clear since rising energy output is accompanied by rising pollution levels. The pursuit of increased energy output has a number of negative effects on the environment, such as deforestation, atmospheric pollution, and ozone layer

destruction. All of these effects are made worse by the release of toxic gases, such as CO₂, NO, NO₂, SO₂, O₃, and CFCs, which have knock-on effects like global warming (Kalogirou, 2004). Using raw resources that are plentiful and always available, renewable energy sources provide a viable alternative. With solar energy emerging as a prominent participant, developed countries have been gradually drawing on these natural reservoirs (Landa, 1975). Although initially carbon-intensive during its development, solar energy later provides an abundance of emission-free energy. To stop and slow down environmental deterioration, a shift towards such renewable energy, especially solar, is essential (Kalogirou, 2004). This change is facilitated by individual efforts, such as using solar energy generation. This lessens our dependency on fossil fuels and reduces the pollutants that go along with them (Walker, 2013). The promise of future cost reductions on energy bills and total returns on investment are significant, even though the initial expenses of adopting renewable energy technologies, including equipment purchase and installation, may be high (Walker, 2013).

Sustainable Transportation

According to Kennedy et al. (2009), the percentage of people living in cities worldwide has already surpassed 50%, with the analysed cities' total greenhouse gas emissions ranging from 4.2 to 21.5 t CO₂/cap. Based on variables like city population, energy consumption, and accessibility to transit, these numbers fluctuate. Collective social activities are essential to reducing environmental consequences caused by humans. Individual behavioural changes, such as choosing to utilise public transit or bicycles for different personal objectives (such as work, education and pleasure), as well as ride-sharing, carpooling and limiting the number of automobiles per family, are essential (Kennedy et al., 2009).

Conclusion

Finally, the conversation about sustainable lifestyles reveals a significant relationship between personal decisions, environmental

resilience, and developmental trajectories. The complex web of decisions—from consumption habits to energy use—illustrates the crucial role that each individual plays within the larger framework of ecological and socioeconomic sustainability. Every little action, no matter how tiny, adds up to have a big influence. Governments, corporations, and communities all have important responsibilities to play, but it is ultimately up to the individual to effect change. We can collaboratively sculpt a greener, healthier, and more sustainable future for future generations by reevaluating our lifestyle, changing consumption patterns, making educated decisions, and fighting for sustainable legislation. Individuals have the power to create a paradigm change that resonates across social dimensions by carefully aligning their daily behaviours with the principles of sustainability. This investigation, taken as a whole, emphasizes the strong agency of people as change agents, establishing a symbiotic link between their decisions and the strength of ecosystems, therefore reviving the path towards a peaceful and sustainable future.

Literature Cited

1. Asano T, Jimenez Cisneros BE. 2008. *Water Reuse: An International Survey of Current Practice Issues and Needs*. IWA Publishing, London, UK.
2. Gilpin A. 1997. *Dictionary of Environment and Sustainable Development*. John Wiley, Chichester, USA.
3. Habel JC, Zachos FE. 2011. *Biodiversity Hotspots: Distribution and Protection of Conservation Priority Areas*. New York, Berlin, Springer.
4. Kalogirou SA. 2004. Environmental benefits of domestic solar energy systems. *Energy Conversion and Management*, 45(18): 3075-3092
5. Kennedy C, Steinberger J, Gasson B, Hansen Y, et al. 2009. Greenhouse gas emissions from global cities. *Environmental Science and Technology*, 43(19): 72-97

6. Kindred Association. 1994. *A Practical Recycling Handbook*. Thomas Telford Ltd, London, UK.
7. Landa HC. 1975. *The Solar Energy Handbook: A Practical Engineering Approach to The Application of Solar Energy to The Needs of Man and Environment, Including Section on Terrestrial Cooling and Wind Power*. Milwaukee, USA.
8. United Nations General Assembly. "Report of the World Commission on Environment and Development: Our common future. (Accessed on 22 August, 2023).
9. Ussher S, Alexander S. 2012. The voluntary simplicity movement: A multi-national survey analysis in theoretical context. *Journal of Consumer Culture*, 12(1): 66-86.

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Text © *Editors*, 2023

Cover page © RED'MAC, Inc, 2023
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ISBN: 978-91-89764-25-5

ISBN-10: 91-89764-25-0

DOI: 10.25215/9189764250

DIP: 18.10.9189764250

Price: kr 150

First Edition: July, 2023
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Printed in Stockholm | Title ID: 9198758225

CONTEXTUALIZING SUICIDE: UNDERSTANDING SOCIAL CONTRACT, ESTABLISHMENT AND AGENCY



DR. SUMIT HOWLADAR

Assistant Professor

Department of Political Science

Krishna Chandra College, Hetampur Birbhum,
(West Bengal), India

❖ ABSTRACT:

As a field of study suicide presents before us a peculiar philosophical and moral limbo. This paper tries to look at this critical issue from the lens of the theory of social contract. Since suicide deals with a certain sense of desire, it is a tremendous political act. In the contemporary socio-political setup, the space for the assertion of a sense of agency varies tremendously between the state and the individual where the former is completely dominating. There is a process of patronization and not of belongingness which the paper argues initiates a process of dehumanization. The larger notion of criminality involved with suicide is a prominent exemplar of this tendency. From the perspective of ushering in social cohesion, the focal point of public policy seems to be disciplining via retributive justice instead of a truly welfare-oriented setup. It is the sense of autonomy which the paper argues is severely compromised in the present setup of societal relations and hence is a gross violation of the social contract that man entered in the first place. Often the line between integration and homogeneity is mixed up thus compromising the democratization process which is one of the basic premises of the social contract. The complete surrender of the sense of agency transforms the individual from a signatory to a mere slave to the contract. The paper argues that interestingly the act of committing suicide can be viewed both as an act of termination of this social contract and as a step to revive and redefine it. Suicide is a power struggle that challenges the moral-legal authority of the state and hence creates a larger sense of angst within the societal setup. It establishes the

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Editors

Dr. Tuhin Majumdar & Dr. Sk. Aktar Hossain

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Chapter 10

Analysis of the Idea of Justice in Plato's Philosophy

Shabana Salahuddin

In the history of philosophy, one of the key concerns of the philosophers has been the idea of justice. This core ethical and political idea also happens to be challenging and vague. In opposition to the assertions of the general social order, justice may relate to personal virtue, social order, or individual rights. One of the most significant classical works on this concept of political philosophy is *The Republic* of Plato, where he creates his preferred Shangri-la and puts forth his theory of justice in relation to his political and ethical beliefs. The deteriorating conditions that were then present in Athens greatly dissatisfied him. Nothing in modern affairs irritated Plato more than the disingenuousness, interference, and political opportunism that was pervasive in Athens of his day in particular and in the entire Greek world in general. He saw justice as the sole means of saving Greece from decay and ruin. The excessive individualism brought on by the Sophists' emphasis on self-satisfaction led to the people seizing the State's offices for their own selfish ends, which ultimately wreaked havoc in Athens in the guise of civil war. Obviously, Plato's main targets for criticism were these two traits: excessive individualism and incompetent questioning. Since Plato believed that justice was the answer to eradicating these ills, the attack took the shape of the creation of an ideal society in which "Justice" reigned supreme. This article, therefore, aims to explore what justice is and how Plato defined it as a key component of an orderly society.

There were many issues that impacted Plato's thinking, but it's probable that Socrates' demise basically shaped his political outlook. It can be argued that political philosophy was Plato's primary focus, regardless of the fact, that only the *Republic*, the *Statesman*, the *Laws*, and a few shorter dialogues are recognized

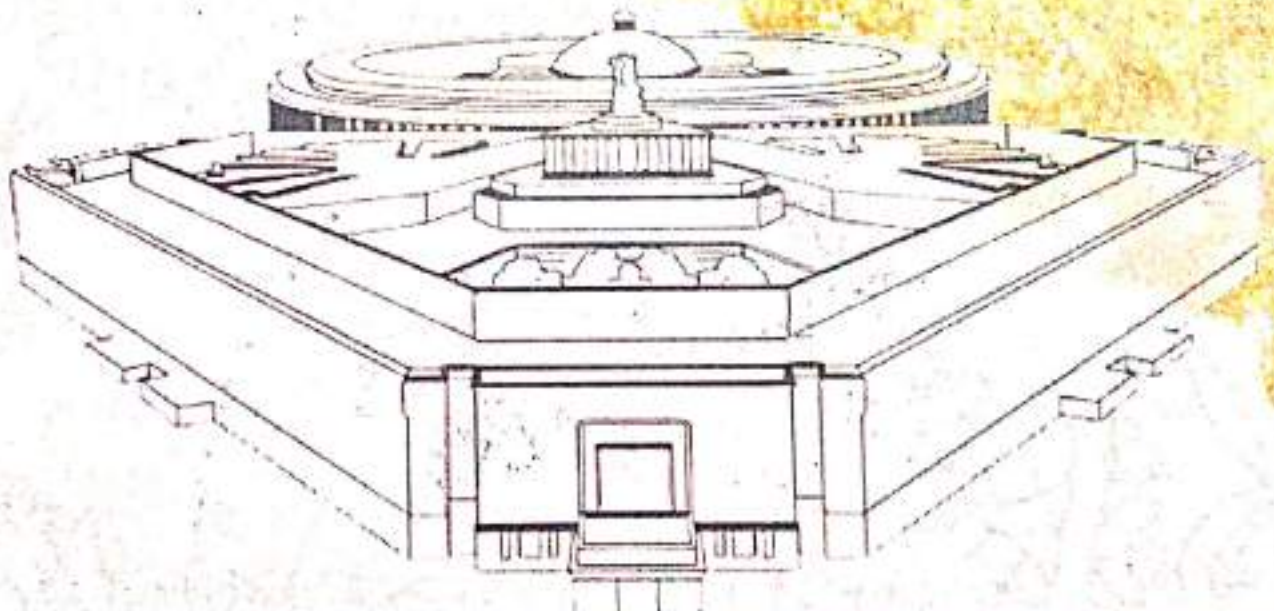
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ISBN : 978-93-95355-37-7

প্রথম প্রকাশ : January, 2024 (Republic Day)

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WORD COUNT ~ 56,400

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প্রাচীনযুগ, মধ্যযুগ এবং আধুনিকযুগ

- নিহার কান্তি বৈদ্য



পৃষ্ঠা : ৪৭-৬৭

বিকেন্দ্রীকরণের অর্থ, দৃষ্টিভঙ্গি এবং রূপ, স্থানীয় স্বায়ত্ত শাসন-
গ্রামীণ এবং শহরকেন্দ্রিক (পশ্চিমবঙ্গের বিশেষ উল্লেখ সহ)

- শুভজিৎ কুণ্ডু



পৃষ্ঠা : ৬৮-৮৬

রাষ্ট্রকৃত্যক নিয়োগ ও অপসারণে কেন্দ্রীয় রাষ্ট্রকৃত্যক কমিশন
এবং রাজ্য রাষ্ট্রকৃত্যক কমিশনের ভূমিকা, প্রশাসনে সাধারণ ও
বিশেষজ্ঞ বিতর্ক

- সালাউদ্দিন সেখ



পৃষ্ঠা : ৮৭-১০০

সমাজকল্যাণের ধারণা ও দৃষ্টিভঙ্গি, ভারতের সমাজকল্যাণ
নীতিসমূহ- ক) শিক্ষাঃ জাতীয় শিক্ষা নীতি, শিক্ষার অধিকার ; খ)
স্বাস্থ্যঃ জাতীয় স্বাস্থ্য মিশন ; গ) খাদ্যঃ খাদ্য নিরাপত্তার অধিকার ;
ঘ) নিয়োগঃ মহাত্মা গান্ধী জাতীয় গ্রামীণ নিয়োগ নিশ্চিতকরণ আইন
(MNREGA), জওহরলাল নেহরু জাতীয় শহর নবীকরণ মিশন (JN-
NURM)

- সুদীপ সাহা



পৃষ্ঠা : ১০১-১২২

DEVELOPMENT OF RUTHENIUM COMPLEXES AS ANTICANCER AGENTS**DR. HENA PAUL**

Assistant Professor

Department of Chemistry

Krishna Chandra College, Hetampur, Birbhum (West Bengal), India

❖ ABSTRACT:

In the present era cancer is one of the major reason of death in the world. The treatment of cancer is now limited to surgery and the use of radiotherapeutic and cytotoxic agents. But all of these have some side effects and so much associated problems. Since the discovery of cisplatin, a number of platinum and non-platinum metal complexes were synthesized and tested against antitumor activity. However, the medical application of cisplatin is limited due to serious side effects and drug resistance. In this circumstance other transition metal complexes have been developed for the treatment of different malignant tumors. Among the platinum group metals Ru(II/III)-based compounds have been developed as promising anticancer agents due to their potential anticancer properties and selective cytotoxic activity. Some ruthenium agents exhibit greater efficiency against cancer metastases than against primary tumors. In this review article I depicted the recent developments of Ru(II) and Ru(III) compounds as antitumor agents.

Keywords: Anticancer agents, ruthenium, cytotoxic activity, tumor cell.

❖ INTRODUCTION:

The chemotherapeutic success of platinum is undeniable, but it is not effective for all types of cancer [1], also it has some side effects like nerve damage, hair loss, nausea, vomiting, diarrhea and abdominal pain etc. So it has stimulated the scientists to search for other metallic cytotoxic compounds with greater antitumor activity and lower toxicity [1]. Three platinum-based anticancer compounds Cisplatin, carboplatin and oxaliplatin are used in routine cancer treatment [2]. Some ruthenium based compounds have been developed and tested to overcome these limitations [3].

Due to some unique chemistry of ruthenium among the platinum metals, it has been subject of study [4]. Ruthenium complexes exhibit relative low ligand exchange rate comparable to Pt(II) and Pt(IV), good stability of several oxidation states, pronounced tendency to form multinuclear complexes [5]. The coordination number of Ru is six, that means ruthenium tends to form octahedral complexes, whereas platinum forms square planar complexes with coordination number four. So, ruthenium can accommodate two more ligands to exploit compared with platinum(II) complexes. Ruthenium also has a strong chemical interaction with a range of different elements. A wide range of ruthenium compounds have been used in the synthesis of potential anticancer drugs [6]. The study of their interaction with proteins, DNA and lipids have received considerable attention because of the spectroscopic and redox properties of ruthenium(II) complexes with heterocyclic N-donor ligands, the higher coordination

Chapter 6

Visible Light Mediated Click Chemistry



Lalan Chandra Mandal and Bidyut Saha

Abstract Since the beginning human civilization, human beings have been searching for hidden mysteries of nature. Nature by natural process synthesizes millions of compounds within itself with the help of easily available reaction conditions. These compounds are proved to have the potentiality to serve human societies in various ways. Synthetic organic chemists also have been investigating various methodologies to synthesize bio-active molecules and designing of efficient compounds. Click chemistry can be considered as one of the important workbench which is directly or indirectly connected with many branches of science like physics, chemistry, biology, nano and material sciences. It has proved to have remarkable application in the field of synthesis of diversified molecular architecture, biosensors, preparation of nanoparticle, preparation of new polymers and so many relevant field. The foundation of click chemistry also fulfils the aspect of the green approach of a reaction. Various literature survey reports have revealed that visible light mediated organic conversions have received an extensive response for designing eco-friendly chemical synthesis for furnishing the desired products from the small molecules through activation. Nowadays, accessible synthetic pathway and productive visible light sources has become most relevant in the modern chemistry of synthetic wings. In this Chapter, we will deliberate an inquisitive flush of exercise in the field of visible light arbitrated click chemistry for diversified desired synthesis. Our appreciation will highlight the recent prosperity in the synthesis of organic structures through click reaction with the help of visible light radiation. Sometimes the insertion of the new cyclic ring or functional group within the structure may lead to enhance bioactivity of the synthesized organic molecule. Different pathways of transformation of molecules in the presence of visible light using variegated methods will be demonstrated in this Chapter.

L. C. Mandal

Department of Chemistry, Krishna Chandra College, Hetampur, Birbhum, West Bengal 731124, India

B. Saha (✉)

Homogeneous Catalysis Laboratory, Department of Chemistry, The University of Burdwan, Burdwan, West Bengal 713104, India

e-mail: bsaha@chem.buruniv.ac.in

A BRIEF ANALYSIS ON FINDINGS OF ALKALOID ARCHITECTURES IN *RAUVOLFIA TETRAPHYLLA* L. (APOCYNACEAE)



LALAN CHANDRA MANDAL

Assistant Professor of Chemistry,
Krishna Chandra College, Hetampur Birbhum
(West Bengal), India

❖ ABSTRACT:

Rauvolfia tetraphylla Linn. (syn. *R. canescens* L., family: Apocynaceae) is a plant species known for its potential medicinal properties, often attributed to its alkaloid content. Alkaloids are natural organic compounds found in various plant species, and they often possess pharmacological properties. In *Rauvolfia tetraphylla*, several alkaloids have been identified, and their architectures play a significant role in the plant's medicinal properties. In this study, I conducted a comprehensive analysis of alkaloid architectures present in *Rauvolfia tetraphylla* L. leaves. These findings shed light on the chemical composition of this plant and offer insights into potential pharmacological applications. Further research is encouraged to explore the therapeutic potential of these alkaloids and their broader implications in the field of natural product chemistry and medicine. This study underscores the importance of investigating alkaloid-rich plants like *Rauvolfia tetraphylla* L. for their potential contributions to pharmaceutical and medicinal science.

Keywords: *Rauvolfia tetraphylla* L. (Apocynaceae), Phytochemical screening, Isolated Compounds, Alkaloids, Structures

❖ INTRODUCTION:

Plants have served as essential resources for humanity since the inception of human civilization on Earth, providing sustenance, clothing, shelter, fiber, fuel, and medicine. Throughout the ages, plants have remained the

fundamental building blocks of traditional medicinal systems, offering mankind an enduring source of innovative therapies [1].

The genus *Rauvolfia*, belonging to the Apocynaceae family and comprises herbs or shrubs characterized by leaves. *Rauvolfia* is widely distributed across tropical regions and contains a diverse array of alkaloids. This noteworthy attribute was initially recognized by Greshoff in 1890. The history of *Rauvolfia*'s discovery traces back to the 16th century, and to this day, approximately 130 species of *Rauvolfia* have been identified, thriving in tropical and semi-tropical regions across the northern and southern hemispheres. In 1703, Charles Plumier bestowed the name "*Rauvolfia*" upon this genus in tribute to Rauwolf Leonhard (1535–1596), a German botanist who explored the plant's potential as a medicinal resource. Within this genus, two highly significant medicinal species are noteworthy: *Rauvolfia serpentina* (L.) Benth. ex Kurz, commonly known as "sarpagandha" in India, and *Rauvolfia tetraphylla* L. Both of these species contain bioactive alkaloids with specific biological properties. *Rauvolfia tetraphylla* L., commonly known as "Kurchi" or "Indian Snakeroot". It is native to the Indian subcontinent and is known for its traditional use in Ayurvedic and other traditional systems of medicine which possesses a wide array of significant applications [2, 3].

This small, evergreen woody shrub exhibits abundant branching and is native to regions including the West Indies, Northern and Southern America. Moreover, it has naturalized in several countries, including India, Pakistan, Sri Lanka, China, Bhutan, Bangladesh, Indonesia, and Myanmar. In India, this plant can be found in the plains of numerous Indian states, including Tamil Nadu, Andhra Pradesh, Karnataka, Kerala, Bihar, Orissa, West Bengal, Madhya Pradesh, Jammu and Kashmir, and Assam. The plant is reservoirs of variety types of compounds including alkaloids, terpenoids, polyphenolic compounds etc. alkaloids are important compounds with a wide range of biological, ecological, and cultural significance. The present article will highlights the presence of diversified alkaloids compounds within the plants.

❖ PHYTOCHEMICAL SCREENING:

Rauvolfia tetraphylla is known for its rich array of secondary metabolites, predominantly alkaloids. Among these, reserpine stands out as a significant alkaloid within *R. tetraphylla*. Through meticulous chromatographic and spectral analyses, researchers have successfully isolated various secondary compounds from different components of *R. tetraphylla*, elucidating their chemical structures.

Djerassi et al. [4] contributed to the elucidation of the structures of two alkaloids, tetraphylline and tetraphyllicine, obtained from the root of *R. tetraphylla*. In one study conducted by Klohs et al. [5], reserpine was extracted from the roots of *R. tetraphylla*. Another exploration led to the isolation of two ester alkaloids, raunescine and isoraunescine, from *R. tetraphylla* [6]. Additionally, Stoll and Hofmann [7] identified two alkaloids, canescine and pseudoyohimbine, in the root extract of *R. tetraphylla*. Heterophyllin, another alkaloid, was successfully isolated from the roots of *R. tetraphylla* [8]. Furthermore, researchers isolated an alkaloid known as Recanescine, which lacks the methoxyl group found in the C-11 position of reserpine and possesses sedative and hypotensive properties [9, 10]. In a separate study, raunescine (later renamed as canembine), an alkaloid, was identified in the root extract of *R. tetraphylla* [11]. Pseudoreserpine, an alkaloid with hypotensive and sedative properties, was isolated from the root as well [12]. Belikov [13] conducted research that led to the isolation of various alkaloids, including ajmaline, ajmalicine, arieine, reserpiline, α -yohimbine, sarpagine, and reserpine, from both the roots and epigeal parts of *R. tetraphylla*. Notably, a novel sarpagine-type alkaloid named N (α)-Demethylaccedine was isolated from the stem bark of *R. tetraphylla* [14]. Using HPTLC analysis, reserpine and ajmalicine were identified in the root of *R. tetraphylla* [15]. Additionally, alkaloids such as 10-methoxytetrahydroalstonine, isoreserpiline, α -yohimbine, and reserpiline were isolated from the chloroform fraction of *R. tetraphylla* leaves through pH-zone-refining fast centrifugal partition chromatography [16]. Panda et al. [17] conducted a comprehensive study, revealing varying concentrations of reserpine across different parts of *R. tetraphylla*. The highest reserpine content was observed in the roots, followed by the stem and leaves. The leaves of *R. tetraphylla* were also found to contain six indole alkaloids, including isoreserpiline, 10-methoxytetrahydroalstonine, 11-demethoxyreserpiline, 10-demethoxyreserpiline, α -yohimbine, and reserpiline [18]. Through bioassay-guided isolation from *Rauvolfia tetraphylla* L. leaves, three alkaloid compounds were successfully isolated and characterized. These compounds include Curan-17-oic acid, 18, 19-Secoyohimban, and Reserpiline [26].

Table 1 provide comprehensive information on the various isolated compounds, parts of the plants and methods used for their identification. Whereas, Table 2 identified phytochemical groups have been identified from various parts of the *Rauvolfia tetraphylla*. Furthermore, Figure 1, 2, 3 and 4 display the chemical structures of alkaloids found in *Rauvolfia tetraphylla*.

Identified compounds	Part	Method	Reference
Reserpine	Callus	TLC, HPLC	[19]
Yohimbine	Leaf	HPTLC	[20]
Reserpine	Stem	HPTLC, MS	[21]
Rauvotetraphyllines A–E, nortetraphyllicine, raucaffricine, peraksine, alstonine, sarpagine, 3-hydroxysarpagine, dihydroperaksine, 10-hydroxydihydroperaksine	Aerial parts	IR, HPLC, NMR	[22]
Rauvotetraphyllines F–H, 17-epi-rauvotetraphylline F and 21-epi-rauvotetraphylline H	Aerial parts	IR, HPLC, NMR	[23]
Ajmaline, yohimbine, α-yohimbine, aricine, isoreserpine, corynanthine, deserpidine, reserpiline, isoreserpiline, lankanescine	Root, bark, leaves	UV, IR, NMR, MS	[24]
Reserpine	Root	HPLC-ESI, MS	[25]
Curan-17-oic acid, 18, 19-Secoyohimban, and Reserpiline	Leaf	HPLC, NMR, IR, GC-MS	[26]
10-methoxytetrahydroalstonine, reserpiline, α-yohimbine, isoreserpiline	Leaf	HPTLC	[27]
3-Isoreserpine, ajmalicine, ajmaline, yohimbine, reserpine	Leaf	HPTLC-MS	[28]
8-Octadecenoic acid, Pentadecanoic acid, 2, (2-Carboxyvinyl)pyridine, Heptadecanoic acid, 3(2H)-Phenanthrene	Leaf	GC-MS	[29]

Table 1: Isolated compounds from *R. tetraphylla* L

Identified various phytochemicalgroup	Part	Referenc e
Terpenoids,tannins,flavonoids,alkaloids,phenols	Leaf	[30]
Alkaloids,tannins,steroids,saponins,cardiacglycosides	Leaf,stem	[31]
Alkaloids,tannin,steroid	Leaf,stem , root	[17]
Alkaloids,steroids,tannins,phenols,saponins,flavonoids	Leaf	[32]
Alkaloids,flavonoids,tannins,saponins	Leaf,fruit	[33]
Alkaloids,tannins,flavonoids,saponins,terpenes	Leaf	[34]
Alkaloids,flavonoids,saponins,tanninsandphenols	Leaf	[35]
Tannins,flavonoids,saponins,glycosides,phenols, terpenoids,steroids	Root	[36]
Steroid,alkaloid,phenoliccompounds,catechin,tannin	Leaf	[37]
Alkaloid,flavonoid,steroid,saponin,tannin	Leaf	[38]
Tannins,flavonoids,alkaloids,terpenoids	Leaf	[39]
Steroids,alkaloids,phenoliccompounds,tannins,catechin	Leaf	[40]
Steroids,alkaloids,flavonoids,phenolics,glycosides	Leaf,fruit	[41]
Saponins,terpenoids,flavonoids,coumarin,alkaloids	Leaf	[42]
Alkaloids,flavonoids,glycosides,saponins,tannins,steroi ds	Leaf	[43]
Tannins,flavonoids,cardiacglycosides	Leaf	[44]
Flavonoids,alkaloids,phytosterols,glycosides,saponins, tannins,triterpenoids	Leaf	[45]
Alkaloids,glycosides,tannins,phenols,saponins	Leaf	[29]

Table 2: Various phytochemical groups isolated from *R. tetraphylla* L.

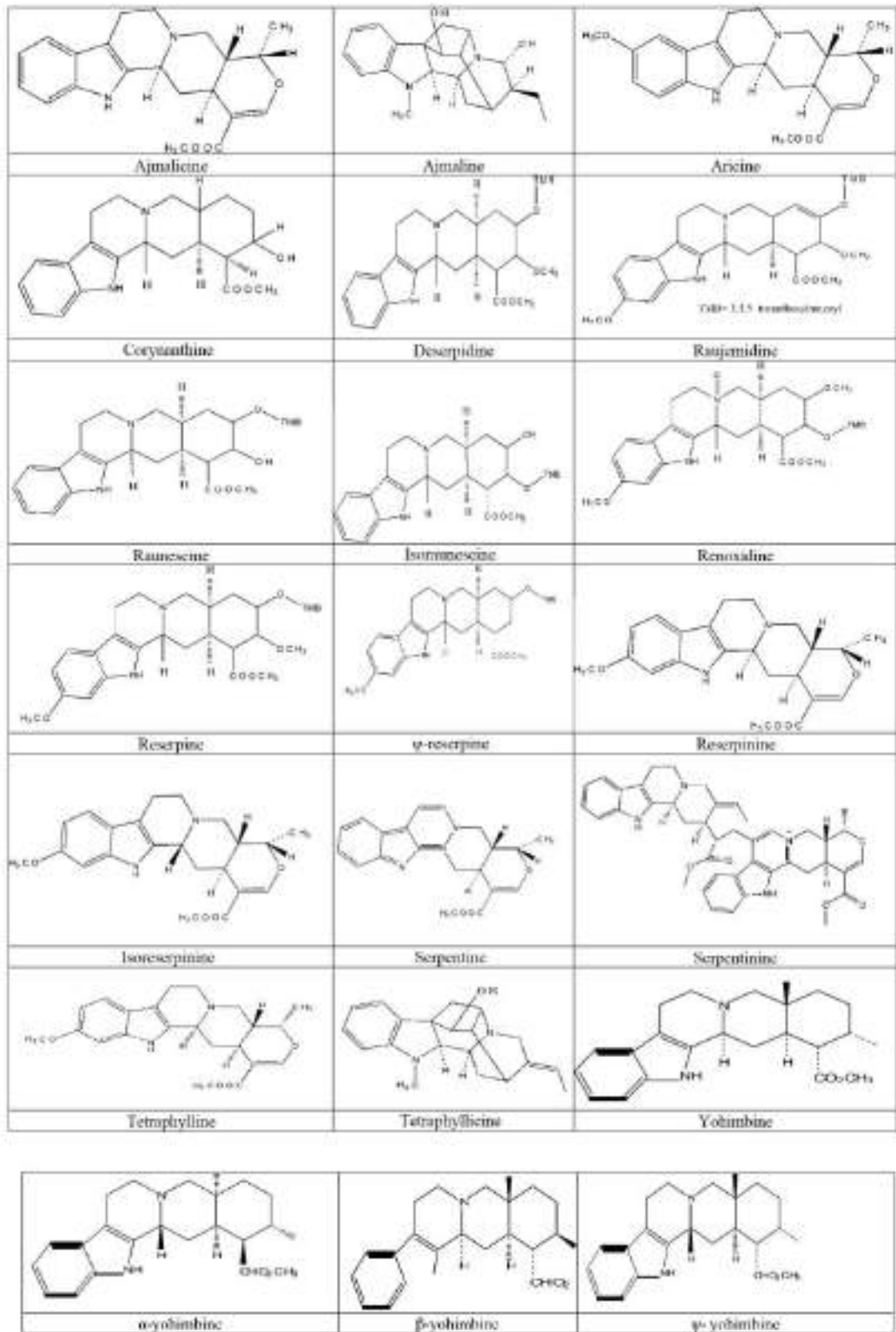


Fig. 1: Structures of different alkaloids isolated from *R. tetraphylla*

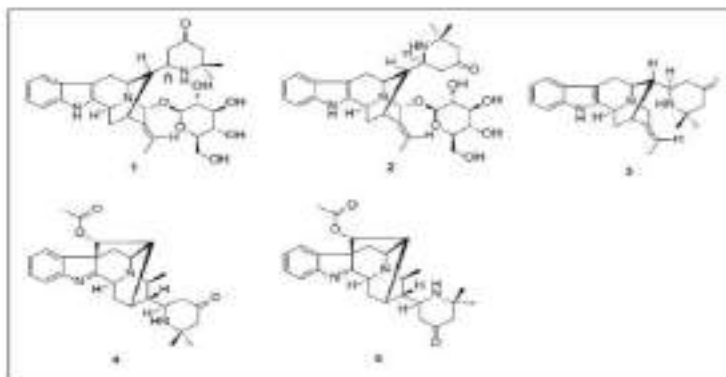


Fig. 2: Structure of Rauvotetraphyllines F-H (1, 3, 4), 17-*epi*-rauvotetraphylline F (2)

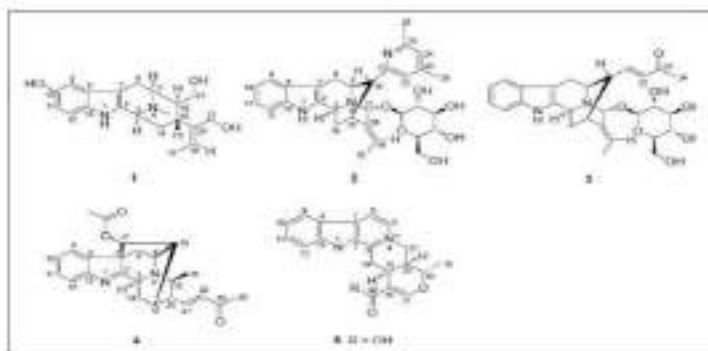


Fig. 3: Structure of Rauvotetraphyllines A-E (1-5)

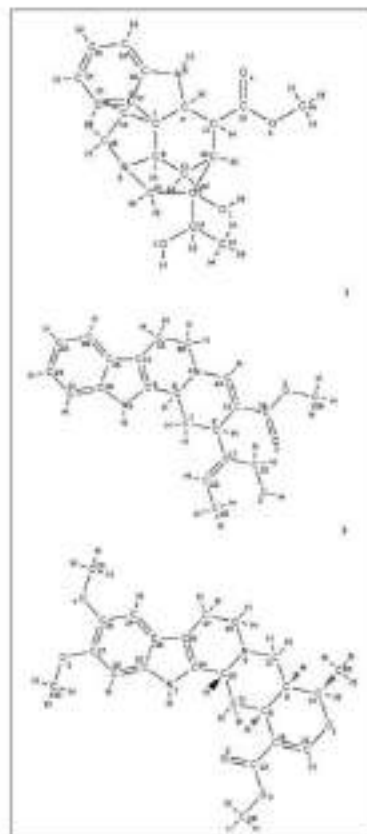


Fig. 4: Curan-17-oic acid (1); 18, 19-Secoyohimban (2) and Reserpiline (3).

❖ CONCLUSION:

The present study has provided valuable insights into the alkaloid structures present in *Rauvolfia Tetraphylla* L. (Apocynaceae). These findings contribute to our understanding of the chemical composition of *Rauvolfia Tetraphylla* L. and may have implications for its potential pharmacological and medicinal applications. Further research in this area is warranted to explore the full scope of these alkaloids and their potential benefits. This study underscores the significance of continued investigation into the natural compounds present in medicinal plants like *Rauvolfia Tetraphylla* L. for their potential therapeutic uses.

❖ REFERENCES:

1. G.M. Cragg and D.J. Newman, *Pure and Applied Chemistry*, 7, 7-24 (2005).
2. R.N. Chopra, S.L. Nayar and I.C. Chopra, *Glossary of Indian medicinal plants*, PID, CSIR, New Delhi, 210 29 (1956)

3. S.P. Ambasta (ed.), *The useful plants of India*, PID, CSIR, New Delhi, 517 (1986).
4. C. Djerassi, J. Fishman, M. Gorman, J. P. Kutney, S. C. Pakrashi, *Journal of the American Chemical Society*, 79(5), 1217-1222 (1957).
5. M. W. Klohs, M. D. Draper, F. Keller, F. J. Petracek *Journal of the American Chemical Society*, 76(5): 1381-1381 (1954).
6. N. Hosansky, and E. Smith, *Journal of the American Pharmaceutical Association*, 44(10), 639-640 (1955).
7. A. Stoll, and A. Hofmann, *Journal of the American Chemical Society*, 77(3), 820–821 (1955).
8. F. A. Hochstein, K. Murai, W. H. Boegemann, *Journal of the American Chemical Society*, 77(13), 3551-3554 (1955).
9. I. H. Slater, R.C. Rathbun, F.G. Henderson, and N. Neuss, *Proceedings of the Society for Experimental Biology and Medicine*, 88(2), 293-295 (1955).
10. N. Neuss, H. E. Boaz, J. W. Forbes, *Journal of the American Chemical Society*, 77(15), 4087–4090 (1955).
11. S. Bhattacharji, M. M. Dhar, M. L. Dhar. *Journal of Scientific and Industrial Research*; 15B, 506-507 (1956).
12. M. W. Klohs, F. Keller, R. E. Williams, G. W. Kusserow, *Journal of the American Chemical Society*, 79(14), 3763-3766 (1957).
13. A.S. Belikov, *Khimiya Prirodnykh Soedinenii*, 5(1), 64 (1969).
14. J. A. Martinez, H. Velez, T. Santana, *Phytochemistry*, 28(3), 961-962 (1989).
15. D. K. Pandey, Radha, A. Dey, *Brazilian Journal of Pharmacognosy*, 26(5), 553-557 (2016).
16. A. Maurya, S. Gupta, S. K. Srivastava, *Journal of Separation Science*, 36(2), 407-413 (2013).
17. S. K. Panda, D. Das, B. N. Tripathy, L. Nayak, *Asian Journal of Plant Science and Research*, 2(2), 151-162 (2012).
18. S. Gupta, V. K. Khanna, A. Maurya, D. U. Bawankule, R. K. Shukla, A. Pal, S. K. Srivastava, *Fitoterapia*, 83(6), 1092-1099 (2012b).
19. S. Anitha and R. B. D. Kumari. *Asian Journal of Plant Sciences*, 12(1), 28-33 (2013).
20. A. Kumar, M. K. Bhardwaj, A. K. Upadhyay, A. Tiwari, B. D. Ohdar, *Journal of Chemical and Pharmaceutical Research*, 3(2), 907-910 (2011).
21. E. T. Paul, *Vistas*, 4(1), 37-43 (2015).
22. Y. Gao, D. Zhou, L. Kong, P. Hai, Y. Li, F. Wang, J. Liu, *Natural Products and Bioprospecting*, 2, 65-69 (2012).

23. Y. Gao, D. Zhou, P. Hai, Y. Li, F. Wan, *Natural Products and Bioprospecting*, 5, 247-253 (2015).
24. L. S. R. Arambewela, G. Madawela, *Pharmaceutical Biology*, 39(3), 239-240 (2001).
25. S. Bindu, K. B. Rameshkumar, B. Kumar, A. Singh, C. Anilkumar, *Industrial Crops and Products*, 62, 430-436 (2014).
26. D. R. Behera and S. Bhatnagar, *Journal of Parasitic Diseases*, 43, 103–112, (2019).
27. S. Gupta, K. Shanker, S. K. Srivastava, *Journal of Pharmaceutical and Biomedical Analysis*, 66, 33-39 (2012).
28. V. S. Nandhini, V. G. Bai, *International Journal of Advances in Pharmaceutical Analysis*, 4(2), 81-87 (2014).
29. H. J. Chandra, T. Vignesh, *Research Journal of Chemistry and Environment*, 20(8), 31-37 (2016).
30. B. Satyanarayana, P. Kasturi, S. P. Devi, *International Journal of Research in Pharmacy and Chemistry*, 8(1), 44-51 (2018).
31. Y. Vaghasiya, R. Dave, S. Chanda, *Research Journal of Medicinal Plant*, 5(5), 567-576 (2011).
32. R. Kavitha, T. Deepa, P. Kamalakannan, R. Elamathi, S. Sridhar, *Int J Pharm Sci Rev Res*, 12(1), 141-144 (2012).
33. D. R. Behera, R. R. Dash, S. Bhatnagar, *International Journal of Pharmacognosy and Phytochemical Research*, 8(7), 1164-1167 (2016).
34. U. D. Patel, H. B. Patel, B. B. Javia, *Wayamba Journal of Animal Science*, 5, 723-728 (2013).

Sudipta Saha, Asish Kumar Dey, Shyamal K. Jash and Sasadhar Majhi*

Chapter 6

Nonconventional solvents for the isolation of natural products

6.1 Introduction

Daily life is connected to natural products (NPs), including food, clothes, beverages, fibers and fuel along with fine chemicals, such as pharmaceuticals and cosmetics [1]. These products need comprehensive processing from very large to small scale including cellulose, paper production to medicines and fragrances. Interestingly, all types of regulations for these processes as well as solvents are required [2]. Currently, much attention has been provided to the substitution of conventional organic solvents by using nonconventional solvents to reduce toxic waste and enhance selectivity and/or extraction efficiency. The design of green along with sustainable extraction methods of secondary metabolites is presently a hot research topic in the multidisciplinary field of applied chemistry, technology and biological sciences [3]. The isolation of high-value bioactive NPs including polyphenols, pigments, proteins and dietary fibers involving nonconventional solvents is now broadly investigated to protect Mother Nature [4–12]. Green solvents are eco-friendly solvents that have a profound role in extracting active chemical components from raw materials (plants). NPs and their structural analogues comprise historically a key role in pharmacotherapy, particularly for cancer and infectious diseases [13]. Hence, this chapter concentrates on a brief introduction, features and applications of nonconventional solvents for the isolation of NPs as an alternative media. This chapter provides an extensive application of nonconventional solvents such as subcritical water (SW), ionic liquids (ILs), bio-based solvents and liquefied dimethyl ether and structures of isolated NPs using nonconventional solvents in a brilliant manner.

Acknowledgment: S. Majhi is thankful to his father Tarani Majhi and mother Sadeswari Majhi for their kind support and inspiration.

* **Corresponding author: Sasadhar Majhi**, Department of Chemistry (UG and PG), Triveni Devi Bhalotia College, Kazi Nazrul University, Raniganj 713347, West Bengal, India, e-mail: sasadharmajhi@gmail.com

Sudipta Saha, Department of Chemistry (UG and PG), Triveni Devi Bhalotia College, Kazi Nazrul University, Raniganj 713347, West Bengal, India

Asish Kumar Dey, Triveni Devi Bhalotia College, Kazi Nazrul University, Raniganj 713347, West Bengal, India

Shyamal K. Jash, Department of Chemistry, Krishna Chandra College, Hetampur, Birbhum 731124, West Bengal, India



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ABOUT THE AUTHORS:

Mr. Ismail Hoque has two decades of expertise as an accomplished Pure Mathematics teacher, influencing numerous students who have subsequently pursued teaching careers in diverse educational settings such as schools, colleges, and universities. Notably, he has authored four books, namely *A Course Text on Advanced Algebra*, *An Introduction to Probability & Statistics*, *Introduction to Metric Spaces*, and *Fundamentals of Mathematical Analysis (Theory & Problems)* published by Techno World, Kolkata.

Dr. Md. Sabiar Rahman presently holds the position of Assistant Professor in the Department of Mathematics at Babaranga Hindu College, situated in North 24 Parganas, West Bengal, India. He possesses a teaching career spanning beyond two decades. His scholarly achievements include the publication of several quality research papers in internationally accepted peer-reviewed journals.

Dr. Pallav Jyoti Pal serves as an Assistant Professor in the Department of Mathematics at Bidya Chandra College, Barisal affiliated to the University of Burdwan, West Bengal, India. He possesses over two decades of teaching experience, instructing undergraduate students. He boasts a notable publication record, with numerous research papers featured in several peer-reviewed international journals.



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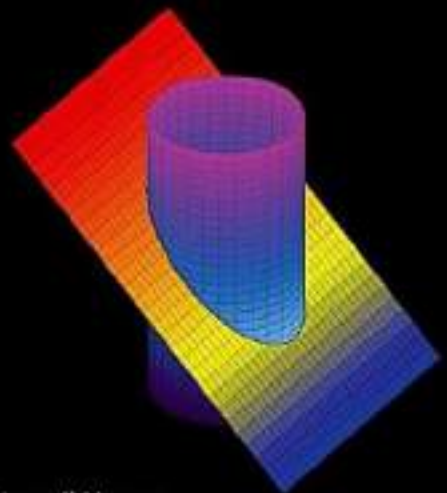


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First Published 2023

THE BOOK WORLD

90/6A, M. G. Road

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Ph. : 033-2257 0007, M : 9051980904

E-mail : thebookworld2012@gmail.com

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Typeset by Arshiya Graphics, Kolkata-700007

Printed and Bound in India

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ISBN : 978-93-81231-94-4

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Introduction

Inviting the Muse : Introducing the Genre of Poetry

Arindam Ghosh

I

Capturing Life's Symphony: Defining Poetry

At first, I found it hard to understand when such categories were ritually invoked, why people felt that they could only respond to literature that replicated their own experience of race, class, or gender... The last thing I wanted from literature was a mirror of my experiences. *What I wanted was a mirror of my feelings, and that I found in poetry... Metaphor, not mimesis [imitation, mimicry], was my realm.*

— Helen Vendler (*Soul Says: On Recent Poetry* 31)

Poetry defies any definition. What is poetry? Poetry relates to language as music relates to noise. It is language made special, so that it will be remembered and valued. Poetry is a genre of literature that evokes a concentrated imaginative awareness of experience or a specific emotional response through language chosen and arranged for its meaning, sound, and rhythm. Poetry is a vast subject, as old as history and older, present wherever religion is present, and possibly—under some definitions—the primal and primary form of languages themselves.

In the enchanting world of literature, poetry stands as a radiant gem, casting its luminous aura over the hearts and minds of those who dare to immerse themselves in its depths. This journey takes us through the realms of what poetry is, a brief historical overview, the various genres of poetry, and the essential elements that give life to poetic verses, including metre and rhythm. The current chapter aims to provide a broad and generalized description of specific attributes associated with poetry and the cognitive processes related to poetic thinking, considering them as modes of thought that can be considered somewhat distinct from other mental processes.

Poetry is the other way of using language. Perhaps in some hypothetical beginning of things it was the only way of using language or simply was language *tout court* (quite short), prose being the derivative and younger rival. It is commonly asserted that both poetry and language were intertwined with early agricultural societies, often attributed to ritualistic practices. There is a specific assertion that poetry, in its initial manifestation, took the form of enchanting incantations recited with the aim of ensuring bountiful harvests. However, this conjecture, while intriguing, obscures a crucial distinction: as the concept of "poems" began to crystallize as distinct objects, recognizable for their poetic qualities, these creations

About the Book:

In the realm of literature, poetry stands as a luminous beacon—a crystalline distillation of human emotion, thought, and imagination. As we embark on this journey into the heart of British poetry, in this undergraduate English Literature book titled *Introduction to Poetry: Companion to Selected British Poetry (Elizabethan to Modern Period)*, we set sail upon the boundless sea of verse. Our vessel is laden with the treasures of words crafted by some of the most esteemed poets in history, from the Elizabethan era to Modernism. Poetry is more than mere words on a page; it is a living, breathing testament to the human experience. It is the cry of love, the lament of loss, the exultation of beauty, and the questioning of existence—all woven into the delicate tapestry of language.

This is a syllabus-oriented companion book, the main purpose of which is to provide a comprehensive guide for the fresh batch of Undergraduate (Three/Four Years Degree Programme) Semester-I students of English (Major) admitted to the various affiliated Colleges under The University of Burdwan following the "Curriculum and Credit Framework for Undergraduate Programmes" (CCFUP) as per National Educational Policy, 2020. Consequently, the primary focus of this book centres on facilitating the academic progress and success of the students.

Dr. Arindam Ghosh is an Assistant Professor of English in Krishna Chandra College, Hetampur, Birbhum, affiliated under The University of Burdwan. He was a Junior Research Fellow of the Department of English, University of Calcutta from 2012 to 2017. He finished his M.Phil. from the same Department in 2014. He has been awarded with the PhD degree from the same Department in 2021 on the "Subversion of the Ideas of Pain and Death in Samuel Beckett's Selected Novels". He has more than 30 academic publications to his credit, which includes many peer-reviewed international journals as well as book-chapters. His area of specialization includes Modernism, Literature & Philosophy encounter, Samuel Beckett, and Critical Theory. He loves trekking in the Himalayas, photography, cinema and sharing stories with friends. He can be reached at ag.eng@kccollege.ac.in.

Aishani Das is an aspiring PhD candidate in English, who has completed her Post-Graduation (M.A. in English) from the University of Calcutta (2020-2022) and Graduation (B.A. English Hons.) from St. Xavier's College (Autonomous), Calcutta (2017-2020). She has qualified GATE in the year 2023 with AIR 53. Her areas of interest include petting cats and dogs, reading fiction (especially detective fiction), listening to good music, eating good food and procrastinating. She loves her pet children, Jasmine and Garfield and rarely socializes with humans. She can be reached at aishanidas.1999@gmail.com.



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English Literature

Texts, Contexts and Concepts



Dr Surendra Kumar Sao
Dr Anurag Ambasta

English Literature:
Texts, Contexts and Concepts

Edited by
Dr Surendra Kumar Sao
Dr Anurag Ambasta



MALIK AND SONS
PUBLISHERS & DISTRIBUTORS
New Delhi

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Dr Surendra Kumar Sao and Dr Anurag Ambasta

First Published: 2023
English Literature: Texts, Contexts and Concepts
ISBN: 978-93-92459-13-9

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Published by

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PUBLISHERS & DISTRIBUTORS

C-293A, Street No. 3, West Karawal Nagar, New Delhi - 110094

Mob.: 9953879692 E-mail: malikandsonspub@gmail.com

Typesetting at: R.S. Print, New Delhi

Printed at: Research Printing Press, New Delhi

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JAMES JOYCE'S AESTHETIC ODYSSEY: RECONTEXTUALIZING THE READER'S ENCOUNTER WITH *FINNEGANS WAKE*

DR ARINDAM GHOSH

James Joyce's *Finnegans Wake* is a notoriously difficult and obscure literary work and the fact that adjectives such as "unreadable," "unapproachable," even "inscrutable" seem inadequate to describe the complexity of the language is an indication that, perhaps more than any other, this is a book that demands a process of negotiation between the text and its readers. In this paper, I will try to use Joyce's own aesthetic theories as a framework to trace the reader's progression through three stages of apprehension—*Integritas*, *Consonantia*, and *Claritas*—and monitors how the reader mediates between private and communal associations, while reading *Finnegans Wake*. This paper will also try to demonstrate that the relationship between the text and its reader is at once personal and collaborative and that reading *Finnegans Wake* is a peculiarly creative process. It establishes parallels between the processes of production and apprehension in order to explore how the aesthetic experience of the reader mirrors that of the writer.

According to Stephen Dedalus in *A Portrait of the Artist as a Young Man*, a work of art is moved through three forms during its production. These forms are: the lyrical, the epical and the dramatic. Stephen goes on to explain the power relationship between a work of art ("an image") and "the mind or senses of the artist himself and the mind or senses of others" (*Portrait* 232) within a community this way:

...you will see that art necessarily divides itself into three forms progressing from one to the next. These forms are: the lyrical form, the form wherein the artist presents his image in immediate relation to himself; the epical form, the form

English Literature

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Dr Surendra Kumar Sao
Dr Anurag Ambasta

The anthology titled *English Literature: Texts, Contexts and Concepts* presents a captivating and meticulously curated collection of 30 papers that take readers on an extraordinary literary odyssey. This resplendent tapestry of literary excellence delves deep into the essence of English Literature, offering an array of iconic works that unravel the intricate tapestry of society and explore the enigmatic human condition. Within the anthology, the reader is transported through the vast and diverse landscape of English Literature. As an irreplaceable treasure in our cultural heritage, this anthology bestows readers with profound insights, skillfully guiding them through the labyrinth of historical contexts that have shaped literary genius. Each turn of the page promises to captivate the reader, offering a world of unparalleled brilliance where the past converges with the present, and the timeless allure of English literature bewitches all who dare to venture forth. This meticulous book ensures resounding success with its captivating papers, leading readers on an enthralling literary journey infused with multiple themes. The profound insights into societal intricacies and the human condition are certain to leave readers spellbound. The ability of this anthology is to kindle a profound appreciation for literary brilliance ensures it will be hailed as an enduring success among enthusiasts, students, scholars, teachers and bibliophiles alike.



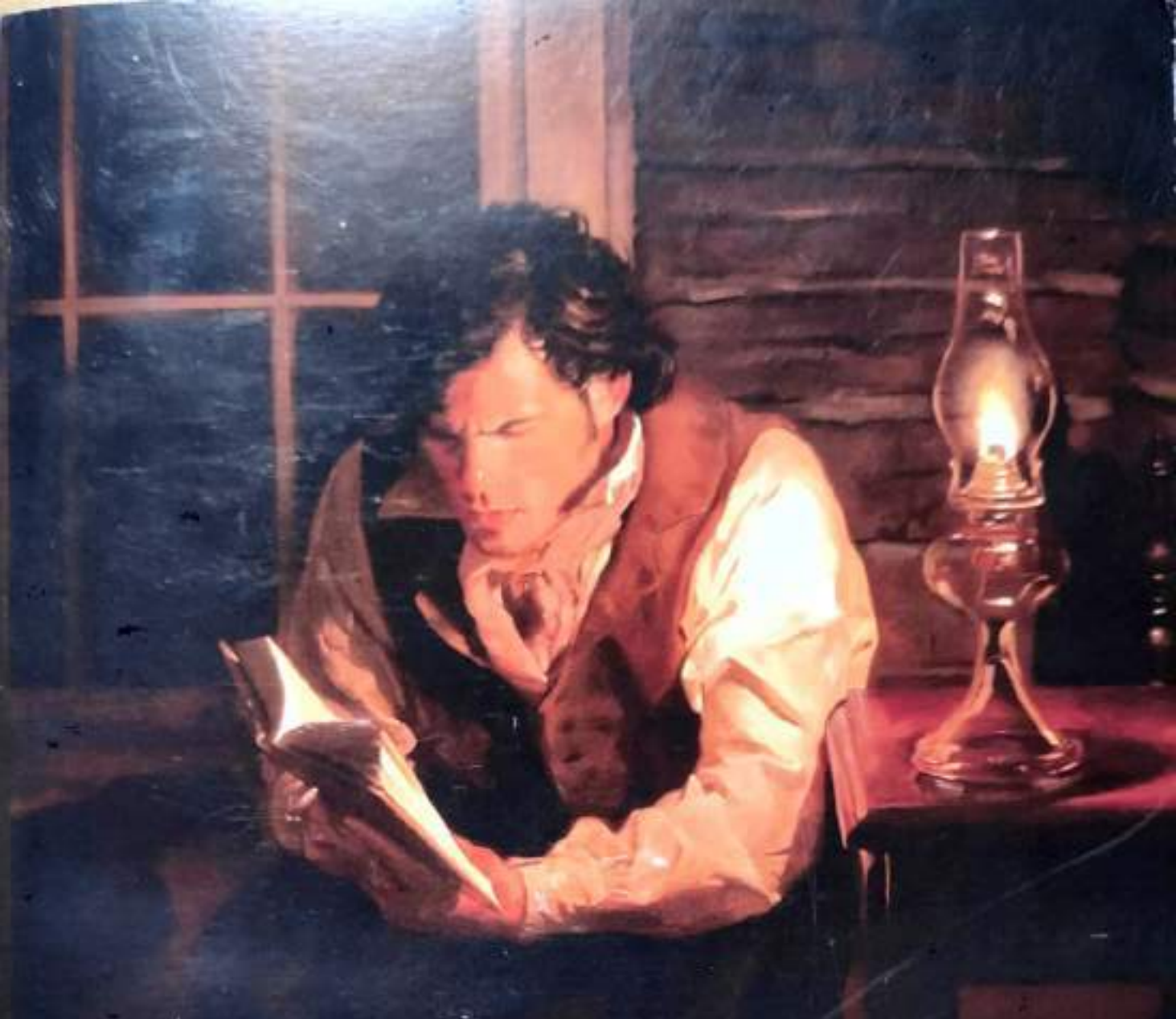
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ISBN: 978-93-92459-13-9



Price: ₹ 1590 | \$ 50



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Selected Essays and Short Stories
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THE BOOK WORLD

First Published 2024

THE BOOK WORLD
90/6A, M. G. Road
Kolkata-700007
Ph. : 033-2257 0007, M : 9051980904
E-mail : thebookworld2012@gmail.com

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Typeset by Arshiya Graphics, Kolkata-700007

Printed and Bound in India

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ISBN : 978-93-81231-67-8

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About the Book:

Designed for the discerning academic reader, this book, *Introduction to Prose: A Comprehensive Study of Selected Essays and Short Stories (Elizabethan to Modern Period)* offers an in-depth, scholarly companion to the primary texts prescribed in The University of Burdwan Syllabus of Major-1 (D.S) Paper of English Honours, providing critical insights, analysis, and contextualization.

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About the Author:

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₹425 \$7.99



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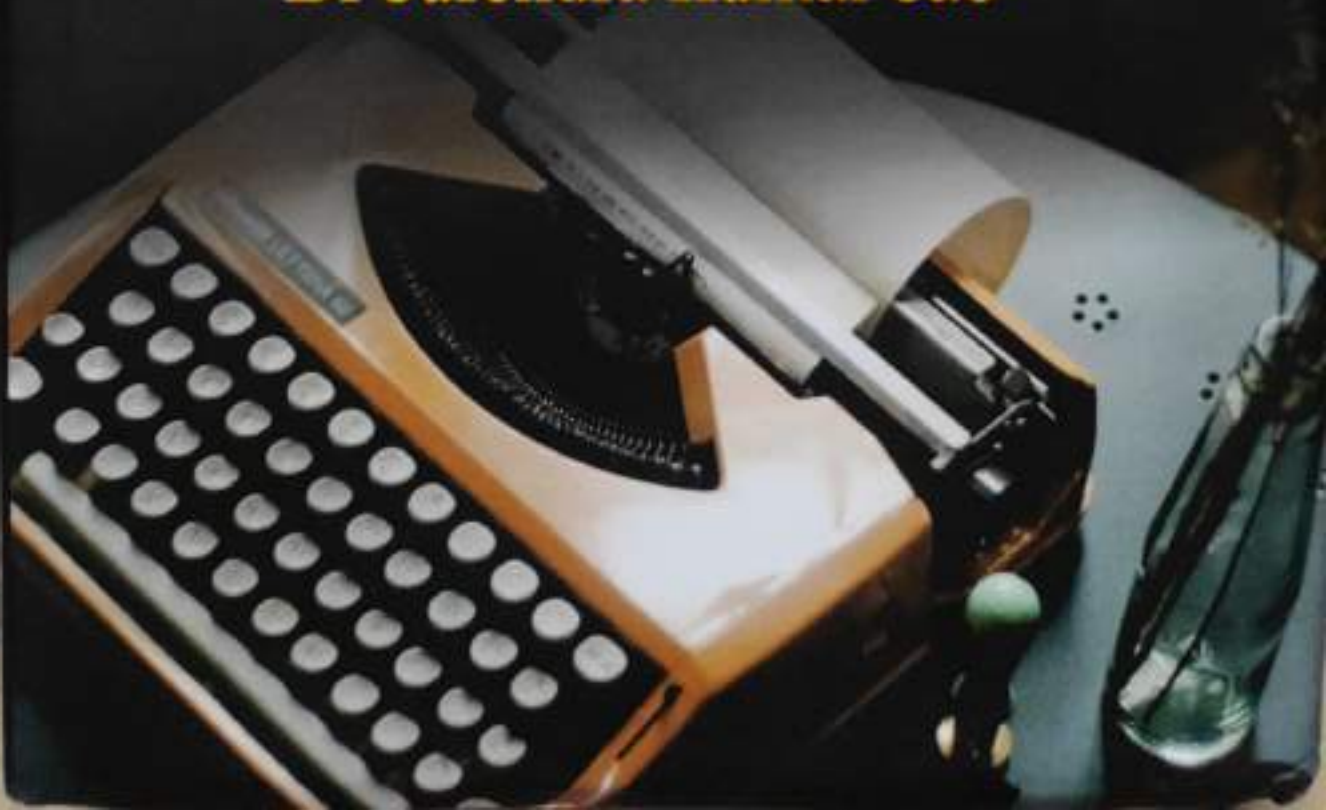
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English Literature

Edited by

Dr Protibha Mukherjee Sahukar

Dr Surendra Kumar Sao



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New Delhi

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First Published: 2023
From Quills to Keyboards:
Critical Essays on English Literature
ISBN: 978-93-92459-36-8

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Typesetting at: R.S. Print, New Delhi

Printed at: Research Printing Press, New Delhi

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College, Sattur, Tamil Nadu. She has published two research papers in CARE-listed journals, three research papers in ISBN books and two research papers in peer-reviewed international journals. She has presented seven research papers in international and national seminar and conferences in various reputed institutions. She has attended 10 national and international conferences, 4 seminars, 8 workshops, 5 FDPs & 8 lectures. She has also qualified for the Chief Minister Research Fellowship.

Lt Dr B. Ajantha Parthasarathi is rendering her service as an Assistant Professor and Research Supervisor of English at Sri S. Ramasamy Naidu Memorial College, Sattur in Tamil Nadu. She has been the Associate NCC Officer since 2017. She has been in this teaching service since 2010. She published 3 books, edited 5 books and contributed chapters to 4 books published by Bloomsbury, New Delhi. She contributed to the FSSAI funded project for translation. She has acted as a Resource Person to national and international seminars, workshops and FDPs. She published 25 research papers in peer-reviewed international journals. She has organised an international and national conference in collaboration with Sahitya Akademi, New Delhi, 2 national seminars sponsored by the Indian Council of Social Science Research, New Delhi, an international conference sponsored by SZCC, Ministry of Culture, Government of India, an international FDP in association with Universiti Malaya, Malaysia and a National level FDP in association with ELTAI. She presented 25 papers in international and national seminars and conferences in various reputed institutions. She attended nearly 25 international and national workshops and 15 FDPs

Dr P. Jeyalakshmi, an Assistant Professor (English) in the Department of Agricultural Extension and Communication V.O.C. Agricultural College and Research Institute, Killikulam (Tamil Nadu Agricultural University, specialises in Syllabus Design, Curriculum Evaluation, ELT, Diaspora Literature, Neuro Feminism, Psycholinguistics and Neurolinguists. With over 15 years of experience, she has authored 3 books and contributed 5 chapters in books and numerous research articles in international and national journals.

Dr Arindam Ghosh is an Assistant Professor of English in Krishna Chandra College, Hetampur, Birbhum, affiliated with

the University of Burdwan. He was a Junior Research Fellow of the Department of English, University of Calcutta from 2012 to 2017. He earned his MPhil from the same Department in 2014. He has been awarded with the PhD degree from the Department of English, University of Calcutta in 2021 on the "Subversion of the Ideas of Pain and Death in Samuel Beckett's Selected Novels." He has more than 25 academic publications to his credit, which includes many peer-reviewed international journals as well as books. His area of specialization includes Modernism, Literature and Philosophy Encounter, Samuel Beckett, and Critical Theory.

Dr D. Nagarani, (MA, MPhil, PhD), serves as an Assistant Professor of English at Anna Adarsh College for Women, Chennai, Tamil Nadu. Her doctoral research at the University of Madras focused on Dostoevsky. Her academic interests encompass Russian Literature, Indian Writing in English, and Literary Criticism. She has contributed to numerous national and international seminars and conferences. She has published her papers in several esteemed journals.

Dr Deepa Yadav is an Assistant Professor at Smt Sharda Johari Nagar Palika Kanya Mahavidyalaya, Kasganj, U.P. She has completed her doctorate from M.J.P. Rohilkhand University, Bareilly, Uttar Pradesh. Her research interests include Diaspora Fiction, Postcolonial Literature, and Indian Literature in English. She is fascinated by how literature and society intersects and interacts with the milieu of identity crisis.

Dr Kongkona Dutta holds a PhD in English Literature conferred by the Department of Humanities & Social Sciences at Indian Institute of Technology, Madras (2015-2021). Since 2021, she has held the position of Assistant Professor in Communication Studies at Thiagarajar School of Management (TSM), Madurai, Tamil Nadu, India. Dr Dutta's scholarly pursuits revolve around various themes such as peace and conflict, identity, vulnerability, sustainability, creative education, media, and communication studies. Her research practices primarily include conceptual, exploratory, and qualitative study investigating Indian folktales, contemporary identity literature, and the often marginalized or underrepresented lived experiences. Dr Dutta's scholarly vision is directed towards a profound exploration of human vulnerabilities across diverse spectra and their intricate socio-cultural implications, aiming

6

DISRUPTING THE BORDERLINES OF REAL AND UNREAL THROUGH CULTURAL SYNCRETISM: REIMAGINING HISTORY, MEMORY, AND TRADITION IN SALMAN RUSHDIE'S *THE ENCHANTRESS OF FLORENCE*

DR ARINDAM GHOSH

Introduction: Blending History with Fantasy

He needed to connect those worlds to the very different world in which he had made his life. He was beginning to see that this, rather than India and Pakistan or politics or magic realism, would be his real subject [...] the great matter of how the world joined up, not only how the East flowed into the West and the West into the East, but how the past shaped the present while the present changed our understanding of the past, and how the imagined world, the location of dreams, art, invention and, yes, belief, leaked across the frontier that separated it from the everyday, 'real' place in which human beings mistakenly believed they lived. (*Joseph Anton: A Memoir* 68-69)

Salman Rushdie's unwavering preoccupation with the authenticity of historical representation is unequivocally evident in the above-mentioned excerpt. He has consistently endeavoured to defend the intricate link between his writings and the tangible world. It is his perpetual endeavour to emphasize that his texts often incorporate truth, which is frequently misconstrued as enchantment. Rushdie's transparency reaches its zenith in his autobiographical work, *Joseph Anton: A Memoir* (2012), wherein he not only explores historical connections but also delves into the interplay of geography. This raises a significant inquiry: Does literature, for Rushdie, serve as a realm where all the elements harmonize, where reality and imagination coexist, contradictions dissolve, and the past converges with the present? Or is it a

domain of pure amusement, or perhaps both? One plausible response can be found in Kenan Malik's "Foreword" to the highly acclaimed compilation on Rushdie's oeuvre, meticulously edited by Robert Eaglestone and Martin McQuillan. Malik argues that "the truth that emerges from Rushdie's writing is the truth of the experience of that in-between world, the world of migration and *mélange*, belonging to more than one place, multiple rather than singular" (Eaglestone and McQuillan, viii).

Salman Rushdie's novels exhibit a remarkable utilization of history and memory, skilfully interwoven with the literary technique of magic realism. By blending historical events and personal memories with fantastical elements, Rushdie challenges traditional interpretations of the past and explores the subjective nature of memory. In his renowned work *Midnight's Children*, Rushdie fuses the historical backdrop of India's independence with magical elements, such as the extraordinary powers possessed by the protagonist Saleem Sinai and how he established telepathic communications by hearing the voices of the children born like him in the midnight hour of India's independence. Similarly, in *The Satanic Verses*, Rushdie delves into the malleability of memory through the experiences of the two protagonists, Gibreel Farishta and Saladin Chamcha. The novel juxtaposes their fragmented and subjective recollections with surreal episodes, blurring the boundaries between reality and imagination. By employing magic realism, Rushdie constructs a narrative that challenges the notion of a singular historical truth, inviting readers to question the reliability of memory and the constructed nature of personal and collective histories.

Within Salman Rushdie's literary repertoire, his ninth novel, *The Enchantress of Florence* (2008), emerges as a masterful tapestry. It intricately entwines multiple layers, centers, and voices, blurring the demarcation between historical occurrences and astonishing escapades, thereby eluding any definitive demarcation between reality and imagination. Unfolding against the backdrop of the fifteenth and sixteenth centuries, this work stands as a "historical novel" that reflects not only the past but also resonates with the sensibilities and concerns of contemporary society "before the real and unreal were segregated forever and doomed to live apart under different monarchs and separate legal systems" (*The Enchantress of Florence* 324).

From Quills to Keyboards

Critical Essays on

English Literature

Dr Protibha Mukherjee Sahukar
Dr Surendra Kumar Sao

Through thirty-five analytical articles on various topics, the anthology titled *From Quills to Keyboards: Critical Essays on English Literature* provides a comprehensive look at the development of English literature. It follows the genre from the exacting quill strokes on parchment to the quick clicks of contemporary keyboards. The growth of English literature has been profoundly influenced by cultural, social, and ideological changes as well as technological advancements. Early examples of English literature were frequently entangled with religious writings and historical accounts, and they revealed the precise work of scribes and monks who used quills to record and communicate. Fast-forward to the Elizabethan and Romantic periods, when writing developed into an art form that expressed both societal issues and personal feelings while the quill remained the predominant tool. The typewriter revolutionised publishing and democratised literary expression during the industrial age. Nowadays, both physical and digital keyboards enable a more fluid and dynamic dissemination of ideas, linking authors and readers on a worldwide scale in previously unheard-of ways. English literature is currently at an intriguing turning point. Due to the widespread use of digital platforms, self-publishing, and social media, more previously unheard voices are now being heard from all over the world. Determining the profound from the fleeting in this sea of words is both a struggle and a source of beauty. The distinctive MLA 9th edition format of this anthology distinguishes it from other books. This collection essentially serves as evidence of the adaptability and resilience of English literature, from the ancient quills to the modern keyboards.



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First Published 2024

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ISBN : 978-93-81231-76-0

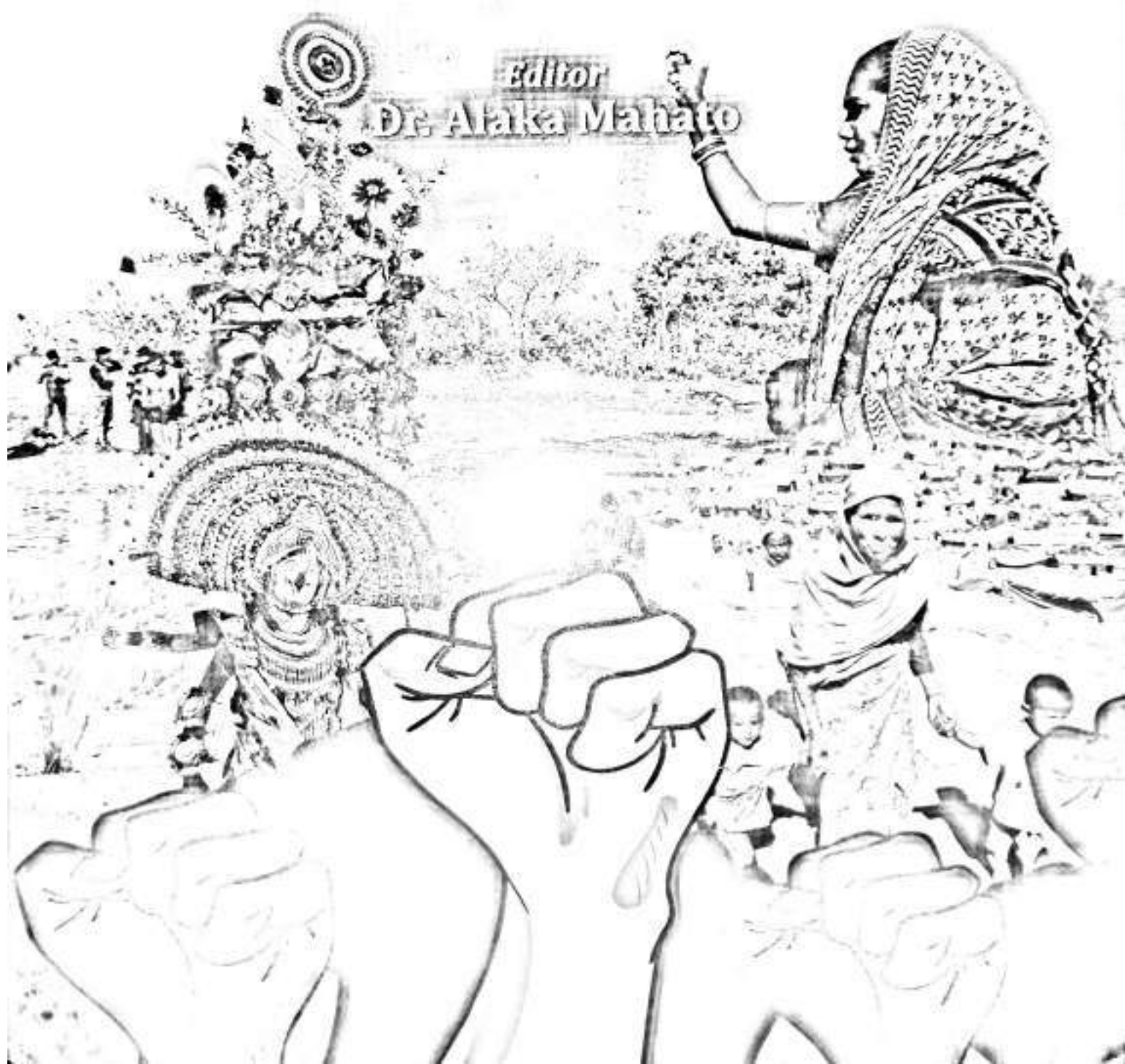
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SOCIETY, CULTURE AND POLITICS OF EASTERN INDIA IN 20TH CENTURY

Editor
Dr. Alaka Mahato



**SOCIETY, CULTURE AND
POLITICS OF EASTERN
INDIA IN 20TH CENTURY**

বিংশ শতকে পূর্ব ভারতের সমাজ,
সংস্কৃতি ও রাজনীতি

সম্পাদক

ডঃ অলকা মাহাতো



CRESCENT
PUBLISHING CORPORATION

Society, Culture and Politics of Eastern India in 20th Century edited by
Dr. Alaka Mahato

© Editor

First Published : 17th April, 2024

ISBN 978-93-48302-48-9

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Published by:

CRESCENT PUBLISHING CORPORATION

4806/24, Mathur Lane,

Ansari Road, Darya Ganj,

New Delhi - 110 002

Ph.: 011 - 23244131

Mob.: +91 - 9711991838, 9999021668

E-mail: crescentbook@gmail.com

Website: www.crescentpublishingcorp.weebly.com

All opinions and information of the Articles given by the Authors are responsible for its errors. By any means editor, publishers or printing are not responsible for any compulsion.

Printed at:

Roshan Offset Printers

Delhi

PRINTED IN INDIA

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ডঃ দীপা দে চট্টোপাধ্যায়

ঊনিশ শতকের দ্বিতীয় ভাগে এডওয়ার্ড টেইলর প্রদত্ত সংজ্ঞা 'সংস্কৃতি'-র ধ্রুপদী সংজ্ঞা হিসাবে বিবেচিত হয়। এই সংজ্ঞা অনুসারে মানুষের বিশ্বাস, আচার-আচরণ, এবং জ্ঞানের একটি সমন্বিত প্যাটার্নকে বলা যায় সংস্কৃতি। সমাজের সদস্য হিসাবে মানুষ যেসব শিক্ষা, সামর্থ্য এবং অভ্যাস আয়ত্ত্ব করে - তা সংস্কৃতির অঙ্গ। সংস্কৃতি মানুষকে প্রকৃত মানুষে পরিণত করে। সংস্কৃতি কোন অখণ্ড অথবা অভিন্ন সংস্কৃতি নয়। এ সমাজ যেমন বহুভাগে বিভক্ত, সংস্কৃতিও তেমনি বহু। এই সংস্কৃতির একটি রূপ হল লোকসংস্কৃতি। কোন এক জনগোষ্ঠীর যুগ যুগ ধরে চলে আসা সাংস্কৃতিক অভ্যাস ও চর্চাকেই লোকসংস্কৃতি বলা হয়। এই 'লোক' হল সেই জনগোষ্ঠী, যারা ভৌগলিক, প্রাকৃতিক, নৃতাত্ত্বিক, ভাষাগত ও পেশাগত কিংবা জীবন জীবিকাগত - এই কোন না কোন বিষয়ে সমন্বয়ের সূত্রে আবদ্ধ। লোক সংস্কৃতি কোন বিচ্ছিন্নতা নয়, এটি ঐকের ধারণার উপর প্রতিষ্ঠিত সমষ্টি বদ্ধ, একত্রিত ভাবনার প্রতিফলন। রাজনীতি থেকে সমাজ, ভাষা থেকে ছন্দ, শরীর বিদ্যা থেকে মনোজগৎ সর্বত্র এর বিচরণভূমি-সারল্যের প্রকাশক, জনগণের প্রানের সম্পদ। A.L.Kroeber এর বৈশিষ্ট্য প্রসঙ্গে বলেছেন, "The relatively small range of their culture content, the close-knitness of the participation in it, the very limitation of the scope, all make for a sharpness of the patterns in the culture, which are

International Peer-Reviewed Edited Book on

RECENT TRENDS IN MULTIDISCIPLINARY RESEARCH

VOLUME - 6

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Dr. Vatsala Tomar

ASSOCIATE EDITORS

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Recent Trends in Multidisciplinary Research (Vol-6)

Edited by: Dr. Dilipkumar A. Ode, Dr. Vatsala Tomar, Mamta Thagela, Dr. Rupesh Kushwah, Dr. Amita Kumari, Dr. Karamthoti Mb, Dr. Damla M, Dr. Ajay Tiwari

-

RED'SHINE PUBLICATION

62/5834 Harplingegränd 110, LGH 1103. Älvsjö, 12573

Stockholm, Sweden

Call: +46 761508180

Email: info.redshine.se@europa.com

Website: www.redshine.se

-

Text © *Editors*, 2023

Cover page © RED'MAC, Inc, 2023

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ISBN: 978-91-89764-34-7

ISBN-10: 91-89764-34-X

DOI: 10.25215/918976434X

DIP: 18.10.918976434X

Price: kr 150

First Edition: August, 2023

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Printed in Stockholm | Title ID: 9198758225

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SEMI-PRECIOUS STONE BEADS FROM MATHURA: A STUDY OF THE KUSHANA PERIOD



KULKUM BANDYOPADHYAY

Assistant Professor,
Department of History,
Krishna Chandra College, Birbhum, (West Bengal), India

❖ ABSTRACT:

The present paper is aimed to investigate specifically the nature and types of stone beads so far reported from Mathura region during the Kushana period. The data used for this paper are primarily the published records from excavations of Mathura and Sonkh, and author's general observation on stone beads from Mathura kept in the Reserved Collection of the Archaeological Survey of India, Purana Qlia, New Delhi. However, absence of detailed excavation report of Mathura excavation constrains us to give a complete picture of the same.

Keywords: *Mathura, Kushana Period, Archaeological Survey of India, Excavation, Semi-precious stones, Beads.*

The modern city of Mathura lies on the right bank of the river Yamuna, is the headquarter of the district (27°14''-27°58'' N/77°17'' -78°12'' E) with identical name. The district is bounded in the north-west by Gurgaon district of Punjab, in the north-east and east by Aligarh of Uttar Pradesh, Agra in the south and Bharatpur district in west. It was a well-known political centre of the early centuries of the Christian era, and acted as a nodal point in the inter-regional and international trade and commerce. For more than a century, the region received special attention by several historians and archaeologists for the reconstruction of its historical identity and association with the mainstream history of the Indian sub-continent. The city of Mathura is also variously mentioned in the ancient Brahmanical, Buddhist and Jain texts.

Prior to independence, explorations and trial excavations were carried out in different sites of Mathura region under the initiatives of Sir Alexander Cunningham, F.S.Growse, Bhagwanlal Indraji, A. Fuhrer, Pandit Radhakrishna, Hilary Waddington, Stuart Piggot and others. In the post-independence period, M. Venkataramyya and B. Saran of the Archaeological Survey of India (henceforth ASI) first conducted a small-scale excavation near Sri Krishna Janamsthan or Katra in 1954-55. This excavation unfolded a cultural sequence ranging from c. 6th century BCE- c. 6th century CE (*Indian Archaeology-A Review* 1954-55:15-16). After that. In 1973-77, under the leadership of Shri M.C. Joshi, ASI conducted excavation at fourteen sites in side Mathura city and as a result of these excavations; a five-phase cultural sequence ranging from c. 6th century BCE- c. 6th century CE has been revealed (*Indian Archaeology-A Review* 1973-74:30-32; 1974-75:48-50; 1975-76:53-55; 1976-77:54-55). Period IV (c. 1st to 3rd century CE) dated to the Saka-Kushana times, witnessed major structural activities like use of