

MAHATMA JYOTIBA PHULE ROHILKHAND UNIVERSITY, BAREILLY

NAAC A++ Accredited; UGC Category -1 University, World QS Ranking, NIRF 51+, ISO 9001:2015 & 14001:2001
Certified

Department of Chemical Engineering

Paper Publication in Scopus Journal/ Book Chapters

Dr M.S Karuna Paper Publications in Scopus Journals

- Ravi Raj V, Karthika V, Geetha L, Velumayil R, Ponnamm V, **Karuna MS** (2025) **Development and Characterization of High-Strength Composites Reinforced with Limonia acidissima Shell Powder an Epoxy Matrix Approach.** International conference on Newer Engineering Concepts and Technology (ICONNECT 2024) with Paper ID: ICONNECT24-227. April 2025.
- Ismail Y, Nagarajan S, Rohan J, Velumayil R, Halder S, **Karuna MS** (2025) **Advancements in Dental Implant Materials: Mechanical Enhancement through Chitosan-Jute and Nano Bio-Silica Reinforced Composites.** International conference on Newer Engineering Concepts and Technology (ICONNECT 2024) with Paper ID: ICONNECT24-228. April 2025.
- Lavanya R, Thanigaivelan, Chockalingam S, **Karuna MS** (2024) **Automated Device Prototype using ANN for the Transesterification of Biodiesel.** 10th International Conference on Communication and Signal Processing (ICCSP). April 2024.
- Titus S, Karthick L, Kiruba S Srithar A, Kumar H, **Karuna MS** (2024) **Activated biochar from Gracilaria Edulis seaweeds: A novel biosorbent for efficient Uranium ion removal in wastewater treatment.** Global NEST Journal (Accepted with ID gnest_05914). April 2024.
- Kumar H, Singh AK, Kumar M, Singh K, Vishal, Gaur A, **Karuna MS**, Nishat A, Saltnat L (2023) **Synthesis of Biodegradable Film Made from Sodium Alginate Embedded with Magnesium Nanoparticles.** Theoretical Foundations of Chemical Engineering. DOI: 10.1134/S0040579523050457 (I.F = 0.8). November 2023.
- Kumar PM, **Karuna MS**, Sureshkumar MS, Rinawa ML, Sakthivel R, Muthukumar K, Kathir Malavan E (2023) Evaluating the effect of magnesium oxide nanoparticles

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- Kumar H, Gaur A & **Karuna MS** (2023) Synthesis of biodegradable carboxymethyl cellulose film-loaded magnesium nanoparticles. Emergent materials. 6: 561-571. (I.F = 4.04). February 2023.
- Gangavathi P, Ramya G, **Karuna MS**, Jeyapiriya K, Magade PB, Manirathnam D (2022) Influence of nanomaterial coated condensing surface on the productivity of evacuated tube assisted solar still. Materials Today: Proceedings 69: 853-857. (I.F = 3.2) Citations = 01. August 2022
- Bohidar SK, Surakasi R, **Karuna MS**, Janardhana K, Louies Praveen S, Narayan P (2022) Sustainable manufacturing for turning of Inconel 718 using uncoated carbide inserts. Materials Today: Proceedings. 66: 1196-1200. (I.F = 3.2). May 2022.
- Mohan Gift MD, Sharun V, Surakasi R, Kannadasan B, **Karuna MS**, Singh MK, Subbiah R (2022) Study on the impact of Nano-reinforcements on the fatigue strength of adhesive joints. Materials Today: Proceedings. 62: 5177-5181. (I.F = 3.2) Citations = 2. March 2022.
- Rinawa ML, Chauhan P, Sharma AK, Singh HK, Ankit, **Karuna MS**, Sudhakar M (2022) An investigation on synthesis, aggregation, and mechanical properties of Al 6082 nanocomposites reinforced by Titanium carbide. Materials Today: Proceedings. 59: 1526-1532. (I.F = 3.2) Citations = 8. February 2022.
- Rinawa ML, Chauhan P, Sharma AK, Singh HK, Ankit, **Karuna MS** (2022) **Water absorption studies of pineapple leaf fiber/nano rice husk powder reinforced epoxy matrix hybrid composites**. Materials Today: Proceedings. 59: 1498-1502. (I.F = 3.2) Citations = 2. February 2022.
- Vedanarayanan V, Parveen Kumar BS, **Karuna MS**, Jayanthi A, Pradeep Kumar KV, Radha A, Ramkumar G, Christopher D (2022) **Experimental Investigation on Mechanical Behavior Kevlar and Ramie Fibre Reinforced Epoxy Composites**. Journal of Nanomaterials. <https://doi.org/10.1155/2022/8802222>. (I.F = 3.791) Citations = 7. February 2022.
- Arul Jose JP, Sharma R, Sharma AK, **Karuna MS**, Rinawa ML, Kumar MNVRL (2022) **Sustainable Concrete Ground Granulated Blast furnace Slag Beam: Numerical Investigation Using Hybrid FRP and GFRP Techniques**. International

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- Prem Kumar M, Prasanna A, Sharma AK, **Karuna MS**, Sharma A, Rinawa ML (2021) **On Fundamental Algebraic Attributes of $\omega - Q$ –Fuzzy Subring, Normal Subring and Ideal**. International Journal of Mechanical Engineering. 6: 0974-5823.
https://kalaharijournals.com/resources/DEC_273.pdf. (I.F = 2.1) Citations = 01.
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- Christopher DS, Atiso TA, Markos M, Jayanthi A, **Karuna MS** (2021) **Thermal Performances Of Hybrid Nano Fluid In A Rectangular Duct**. International Journal for Computational Methods in Engineering Science and Mechanics. 10(12): 23-28.
https://www.researchgate.net/publication/359583737_THERMAL_PERFORMANCE_S_OF_HYBRID_NANO_FLUIN_A_RECTANGULAR_DUCT. (I.F = 0.903).
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- Rinawa ML, Chauhan P, Sharma AK, Sharma DK, **Karuna MS**, Singh MK (2021) **A Comprehensive Review on Solar Air Heater Heat-Transfer and Friction Characteristics**. J Nucl Energy Sci Power Generat Techno. 10:11.
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Dr M.S Karuna Book Chapters Publication

- Gangwar P, **Karuna MS**, Kumar H (2025) **Bridging the Digital Divide: Technology as a Force for Empowerment, Digital Education, and the Access Gap in the New Economy - An Indian Women's Perspective** (For the book 'SHAKTI: The Century of Women's Rise in India (1947-2047)' – Volume I: Breaking Chains) (Accepted for Publication).
- Gangwar P, **Karuna MS**, Kumar H (2025) **Analysis of Ramganga River**. For the book 'Current Trends of Engineering and Technology Volume 2'. ISBN: 978-93-49060-14-2. February 2025.
- Gangwar P, **Karuna MS**, Kumar H (2025) **From Defiance towards Democracy: The Indomitable Spirit of Indian Women in Crafting Freedom and Fundamental**

Rights. For the book ‘Research Insights in Humanities, Commerce, and Management’. ISBN: 978-93- 48620-33-0. June 2025

- Gangwar P, **Karuna MS**, Kumar H (2025) **From Margins to Mainstream: Tracing Women’s Journey in Science and Technology in India**. For the book ‘Contemporary Developments in Science and Technology Volume II’. ISBN: 978-93-48620-97-2. June 2025.
- Gangwar P, **Karuna MS**, Kumar H (2025) **Carbon Dynamics affected by Forest Diseases**. For the book ‘Innovative Research in Agricultural Science Volume II’. ISBN: 978-93- 48620-91-0. June 2025.
- Khan H, Yusuf M, Elgharbawy AA, Makarem MA, **Karuna MS** (2023) **Carbon Capture by Ionic Liquids**. Encyclopedia of Renewable Energy, Sustainability, and the Environment. ISBN: 9780124095489. DOI: [10.1016/B978-0-323-93940-9.00005-0](https://doi.org/10.1016/B978-0-323-93940-9.00005-0). Citations = 01. June 2023.
- Premkumar M, Bai HG, Prasanna A, Parmar KPS, **Karuna MS**, Rinawa ML (2022) **On Algebraic Characteristics of Fuzzy T-Sub algebra in T-Algebra under the Normalization**. 2022 International Conference on Computational Modelling, Simulation and Optimization (ICCMSO). ISBN: 979-8-3503-3288-9. DOI: 10.1109/ICCMSO58359.2022.00040. April 2023.
- Vennila T, **Karuna MS**, Srivastava BK, Venugopal J, Surakasi R, Boopathi S (2023) **New Strategies in Treatment and Enzymatic Processes: Ethanol Production From Sugarcane Bagasse**. Human Agro-Energy Optimization for Business and Industry. ISBN 10: 1668441187. DOI: 10.4018/978-1-6684-4118-3.ch011. Citations = 31. January 2023.
- Ankit, Rinawa ML, **Karuna MS** (2022) **Green Manufacturing: Benefits, Implementation and Challenges**. Advances in Manufacturing Engineering. ISBN: 978-981-19-4208-2. DOI: 10.1007/978-981-19-4208-2_29. Citations = 02. August 2022.

Dr Harish Kumar Paper Publications in Scopus Journals

- **Kumar H**, Singh AK, Kumar M, Singh K, Vishal, Gaur A, **Karuna MS**, Nishat A, Saltnat L (2023) **Synthesis of Biodegradable Film Made from Sodium Alginate**

Embedded with Magnesium Nanoparticles. Theoretical Foundations of Chemical Engineering. DOI: 10.1134/S0040579523050457 (I.F = 0.8). November 2023.

- **Kumar H, Gaur A & Karuna MS (2023)** Synthesis of biodegradable carboxymethyl cellulose film-loaded magnesium nanoparticles. Emergent materials. 6: 561-571. (I.F = 4.04). February 2023.

Dr Harish Kumar Book Chapters Publication

- **Gangwar P, Karuna MS, Kumar H (2025) Bridging the Digital Divide: Technology as a Force for Empowerment, Digital Education, and the Access Gap in the New Economy - An Indian Women's Perspective** (For the book 'SHAKTI: The Century of Women's Rise in India (1947-2047)' – Volume I: Breaking Chains) (Accepted for Publication).
- **Gangwar P, Karuna MS, Kumar H (2025) Analysis of Ramganga River.** For the book 'Current Trends of Engineering and Technology Volume 2'. ISBN: 978-93-49060-14-2. February 2025.
- **Gangwar P, Karuna MS, Kumar H (2025) From Defiance towards Democracy: The Indomitable Spirit of Indian Women in Crafting Freedom and Fundamental Rights.** For the book 'Research Insights in Humanities, Commerce, and Management'. ISBN: 978-93-48620-33-0. June 2025
- **Gangwar P, Karuna MS, Kumar H (2025) From Margins to Mainstream: Tracing Women's Journey in Science and Technology in India.** For the book 'Contemporary Developments in Science and Technology Volume II'. ISBN: 978-93-48620-97-2. June 2025.
- **Gangwar P, Karuna MS, Kumar H (2025) Carbon Dynamics affected by Forest Diseases.** For the book 'Innovative Research in Agricultural Science Volume II'. ISBN: 978-93-48620-91-0. June 2025.

Dr Harish Kumar Book Publication

- **Karuna M S, Kumar H (2025) Green synthesis to Global solutions: Exploring the Power of Nanoparticles in the Biomedical Field and Food Packaging Industries,** P.K. Publishers & Distributors New Delhi, ISBN No: 978-93-49060-88-3. June 2025.

Ms. Parul Gangwar (Research Scholar) Book Chapters Publication

- **Gangwar P, Karuna MS, Kumar H (2025) Bridging the Digital Divide: Technology as a Force for Empowerment, Digital Education, and the Access Gap in the New Economy - An Indian Women's Perspective** (For the book 'SHAKTI: The Century of Women's Rise in India (1947-2047)' – Volume I: Breaking Chains) (Accepted for Publication).
- **Gangwar P, Karuna MS, Kumar H (2025) Analysis of Ramganga River.** For the book 'Current Trends of Engineering and Technology Volume 2'. ISBN: 978-93-49060-14-2. February 2025.
- **Gangwar P, Karuna MS, Kumar H (2025) From Defiance towards Democracy: The Indomitable Spirit of Indian Women in Crafting Freedom and Fundamental Rights.** For the book 'Research Insights in Humanities, Commerce, and Management'. ISBN: 978-93-48620-33-0. June 2025
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- **Gangwar P, Karuna MS, Kumar H (2025) Carbon Dynamics affected by Forest Diseases.** For the book 'Innovative Research in Agricultural Science Volume II'. ISBN: 978-93-48620-91-0. June 2025.

Ms. Parul Gangwar (Research Scholar) Book Publication

- **Parul Gangwar (Research Scholar) (2025) RESILIENT ROOTS Ethnobotanical Knowledge and Climate Change in Jaunsar-Bawar.** P.K. Publishers & Distributors New Delhi. ISBN No. 978-93-49060-66-1. June 2025.