

2021-22

1. Converting Sapolite (a low-grade unutilized material) into refractory aggregates: A viable substitute for calcined clay in the refractory industry; **P. G. Bhukte**, G. T. Daware, S. P. Masurkar, M. J. Chaddha & A. Agnihotri (2021); **Journal of Mining, Metallurgy & Exploration, Springer**, 38, 1589-1595, **Apr 2021**; <https://link.springer.com/article/10.1007%2Fs42461-021-00407-w>
2. Comparison of metal flow characteristics in aluminium extrusion die using numerical simulations for AA6063 and AA7075; **VNSUV Ammu**; Samrat Ambade, N.S. Anas, R.N. Chouhan, Anupam Agnihotri ; **International Journal of Vehicle Structures & Systems**; **June 2021** ; <https://doi.org/10.4273/ijvss.13.2.09>
3. Value Addition of Alumino-Silicates: Consolidation of Mining Rejects and Industrial Slag by Geo-Polymerization; **P. A. Mohamed Najar**, Amrita Karn, Vishakha Sakhare, Mukesh Jitsingh Chaddha, Anupam Agnihotri, Book Chapter in Innovations in Sustainable Mining pp 57-70, **Springer-Nature, Part of the Earth and Environmental Sciences Library book series (EESL)**, **Jul 2021**; [https://doi.org/10.1007/978-3-030-73796-2\\_4](https://doi.org/10.1007/978-3-030-73796-2_4)
4. Utilization of Aluminium Industry Solid Waste (Red Mud/Bauxite Residue) in Pollution Control. In: **Suchita B Rai**, Bahadure S., Chaddha M.J., Agnihotri A. (2021) Randive K, Pingle S, Agnihotri A. (eds) Innovations in Sustainable Mining. **pp 21-43** Earth and Environmental Sciences Library. Springer, Cham. **Jul 2021** [https://doi.org/10.1007/978-3-030-73796-2\\_2](https://doi.org/10.1007/978-3-030-73796-2_2)
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6. A study on the impact of material synergy in geopolymer adobe: Emphasis on utilizing overburden laterite of aluminium industry; **Mohamed Najar**, Vishakha Sakhare, Amrita Karn, Mukesh Chaddha, Anupam Agnihotri, **Open Ceramics, Science Direct, Elsevier**, Vol-7, **Sept 2021**, 100163 pp 1-8  
  
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7. Method development and validation for quantification of trace elements in aluminous ore (Bauxite) using ICPOES; **Upendra Singh**, Sonali, Thawrani, Jyoti Pendam, Anupam Agnihotri; **Journal of Analytical Chemistry**: Springer USA (pp 1395-1398, Volume 76, No. 12, **Dec 2021**, <https://link.springer.com/article/10.1134/S106193482112011X>
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9. [Innovations in Sustainable Mining](https://www.springerprofessional.de/en/aluminum-dross-value-added-products-to-achieve-zero-waste/19320812) Aluminum Dross: Value Added Products to Achieve Zero Waste, **Upendra Singh** pp 45-56, **July 2021**, Springer ; <https://www.springerprofessional.de/en/aluminum-dross-value-added-products-to-achieve-zero-waste/19320812>
10. Value-Added Geopolymer Product to Offset Expenditure on Waste Management and Sustainability; **Mohamed Najar**, Vishakha Sakhare, Amrita Karn, Mukesh Chaddha, Anupam Agnihotri; **Journal of Chemical Technology and Metallurgy**, Jan 2022 57, 1, 2022, 141-152, Bulgaria, [https://dl.uctm.edu/journal/node/j2022-1/18\\_20-153p141-152.pdf](https://dl.uctm.edu/journal/node/j2022-1/18_20-153p141-152.pdf)

CONFERENCE PROCEEDINGS

*Interactive Virtual Meet on Proppants; JNARDDC Nagpur on 30<sup>th</sup> July 2021*

11. Prospective raw materials for the development of ceramic proppants; **P G Bhukte**, M. J. Chaddha, G. T. Daware, S P Masurkar & A. Agnihotri

*25<sup>th</sup> International conference on Nonferrous Metals (ICNFM-2021) New Delhi; 03-04 Sept 2021*

12. Microstructural and thermal stability studies on cast Al-Ce alloy for high temperature automobile applications; **Papa Rao Mondi**, V. N. S. U. Viswanath Ammu, R. N. Chouhan, Anupam Agnihotri, In. Proc. pp. 138-143.
13. Extrudability and process parameters selection in extrusion of AA2024 alloy, **V N S U Viswanath Ammu**, K Immanuel Raju, R N Chouhan, A Agnihotri
14. Waste aluminium dross: an alternative resource for PAC, **Jyoti Pendam**, Sonali Thawrani, Mayur Tirpude, Upendra Singh, A Agnihotri,
15. Rheological investigations of Bayer plant liquor, **Prachiprava Pradhan**, M J Chaddha, Suchita B Rai, Kishore J Kulkarni, Megha Panchal, A Agnihotri

*7<sup>th</sup> Edition of International Conference on Nanotechnology for Better Living NBL-2021, 07-11<sup>th</sup> September 2021.*

16. Growth and Characterization of Single Crystal Alumina using 3N Pure Alumina Powder; **Priyanka Nayar**, Janakiraman Kumar, Upendra Singh, A Agnihotri

*Bauxite Miner's Meet (BMM-2021)', JNARDDC Nagpur on 29<sup>th</sup> September 2021.*

17. Lateritic Bauxite Deposits - Status & value addition of low-grade materials; **P G Bhukte** - G. T. Daware, M. J. Chaddha & A. Agnihotri

*International Conference on Energy & Advanced Materials ICEAM 2021, Jaypee Institute of Information Technology, Noida, 21-23<sup>rd</sup> October 2021.*

18. Milling route for synthesis of nano-aluminium hydroxide for development of low-density polymer composites, **Suchita B Rai**, M. J. Chaddha, M. T. Nimje, Sneha Bahadure, Smita Mohanty, A. Agnihotri.

*National Conference on "Present and future prospective of minerals and mining industry in changing economic environment (PFPMICEE-2021)"; P G Department of Geology, RTMNU, Nagpur, 23-24<sup>th</sup> December 2021*

19. Geo-technological evaluation of bauxite deposits and its significance in auctioning of bauxite blocks; **P G Bhukte**, M J Chaddha, G T Daware, A Agnihotri
20. Process for Recovering Unused Mineral Values of Industrial Rejects: Scope of Physico-Chemical Treatment for Mineral Augmentation, **Mohamed Najjar**, Amrita Karn, P G Bhukte, M J Chaddha, and A Agnihotri,

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21. Red mud supported co-catalyst for biodiesel production using waste cooking oil and its economic assessment, **Prachiprava Pradhan**, M J Chaddha, Vinod Ganvir, Amit Agrawal, Anand Shende, Suchita B Rai, K J Kulkarni and A Agnihotri
22. Non-reinforced High-strength Geopolymer from Industrial Rejects for Sustainable Engineering, **Mohamed Najjar**, V Sakhare, N Azad, Amrita Karn, M J Chaddha, A Agnihotri

**International e-Conference “Innovations in Science, Technologies, Humanities, Management and e-Commerce for Sustainable Rural Development”, Anand Niketan College of Science, Arts and Commerce, Anandwan, Warora, District Chandrapur, Maharashtra, 14-15<sup>th</sup> March 2022.**

23. Synthesis of 3N Pure Alpha Nano Alumina from Aluminium Foil, **Priyanka Nayar**, Pooja Yadav, Sandeep Kowe, Upendra Singh and Anupam Agnihotri.