

Azadi ka Amrit Mahotsav-activities already done March to June 2021

S. No.	Themes	March to June 2021: Activities Conducted
1	CSR	<ol style="list-style-type: none"> <li>1. Plantation of "Neem" saplings at MCP Hospital, Kolkatta. (HCL)</li> <li>2. Development of an environment park and a golf course at Damanjodi, Odisha with plantation of saplings and development of lawn. (NALCO)</li> <li>3. Plantation of saplings in various units of NALCO.</li> </ol>
2	Social and Cultural Activities	<ol style="list-style-type: none"> <li>1. Celebration of International Day of Yoga across plants and site offices, including family members of employees. (NALCO).</li> <li>2. Promotion of campaign on digital notice board &amp; Digital Wall/TV. (NALCO).</li> <li>3. Bharat ka Amrut Mahotsava Banners put up at Mines &amp; Refinery Complex, Damanjodi apart from continuing promotion at township in Bhubaneswar &amp; S&amp;P unit at Angul.</li> <li>4. Celebrated Van Mohotsav Week.</li> <li>5. Updates in Social Media with #AzadiKaAmrutMahotsav.</li> <li>6. Scrolling of Slogans/Messages digitally, including generating awareness.</li> <li>7. Organising an online talk on technological might of the Country.</li> <li>8. E-lecture of "Bharat ka Amrut Mahotsava", History and Role of Geological Survey of India in nation building, mission wise activities of Geological Survey of India, career opportunities in geology and future scope in geology. (GSI)</li> <li>9. Essay competition for Save Earth/Jungle/Environment. (MECL).</li> <li>10. Poetry competition (Hindi) for : भारत का स्वतंत्रता संग्राम (MECL).</li> <li>11. Slogans Competitions for: आत्मनिर्भर भारत (MECL)</li> </ol>
3	Scientific & Technological Advancement	<ol style="list-style-type: none"> <li>1. Online talk on Science &amp; Technology for a Sustainable Future (NALCO)</li> <li>2. Ground Penetrating Radar (GPR) as Non-destructive Evaluation. (NIRM)</li> <li>3. Multi- Channel Analysis of Surface Waves (MASW) for compaction studies. (NIRM)</li> <li>4. Tomography for defect mapping. (NIRM)</li> <li>5. Electrical Resistivity Tomography (ERT) for supplementary investigation. (NIRM).</li> <li>6. Importance of Electrical Resistivity Tomography as a supplementary</li> </ol>

investigation tool.

7. Online audio-visual presentation: Blasting design in urban environment needs skill for control of ground vibration and flyrock. This lecture is aimed to explain as to how this is achieved during construction of metro rail, traffic tunnel and infrastructure projects in cities.
8. Implementation of newer, efficient and complex mining methods to optimise the ore recovery demonstrated by way of 3d numerical modelling.
9. Online audio-visual presentation: The concept of ensuring safety of structures for the common man in the earthquake prone areas by analysis of numerical models.
10. Introduction to Geological Mapping/Techniques of Geological & Geochemical Mapping. (GSI)
11. Outreach programmes on varied topics like : Hill Slope Stability and Slope Stabilisation Techniques in India, Landslide: Process, Types and Investigations with case history, Macro-scale (1:50,000) Landslide susceptibility mapping in Kishtwar and Anantnag districts of UT: Jammu and Kashmir, Geoscience for sustainable development goal: Perspectives from Landslide and Slope Stability Investigation-Case study from Batote area, Landslide susceptibility mapping using remote sensing data and field observations along NH-44, Jammu and Kashmir, India in various universities and colleges. (GSI).
12. Fundamental elements of map, Toposheet, Topographic maps and conventional signs & symbols used in Toposheet
13. The online lectures on various aspects regarding origin, genesis, occurrence and targeting diamonds associated with kimberlites and other source rocks with special reference to Andhra Pradesh. Explanation of the processing and testing of diamondiferous nature of kimberlites and alluvial gravels in parts of Andhra Pradesh. A documentary film on Kimberlites was also shown on the occasion.
14. The GSI explained the students about the working of the drilling machine. The drilled cores were also shown to the students.
15. Lecture on "Natural Hazards with Special Reference to Landslide Disaster and its Management". The lecture was started with a brief outline of National Hazards of various kinds and its general pattern in all three broad geological domains i.e. Extra-Peninsula, Indo-Gangetic Plain and Peninsula. This was followed by general concepts of Landslides and Slope stability with concepts of Hazards, Disaster, Risk and Vulnerability. Further followed by various kind of landslide studies undertaken by GSI viz. Landslide inventory, Macroscale Landslide Hazard Zonation/Susceptibility Mapping, Mesoscale Landslide Susceptibility Mapping and Site Specific Landslide Studies and remedial

measures.

16. Uranium Contamination in Groundwater: A Case Study from Bhatinda and Mansa districts of Punjab and Sirsa district of Haryana.
17. A webinar was organised on “The Geology and Mineral Resources of Odisha” bringing out different blocks of Iron, Manganese and Base metal for auctioning.
18. Conducted a series of lectures with the theme “Introduction to geology of the North East Region” as an outreach program in collaboration with Department of Geology, North Eastern Hill University (NEHU) from GSI, NER, Shillong.
19. Lecture on “Lithology of the Eastern Himalaya and Eastern Syntaxial zone highlighting the rock types of the region with special emphasis on the economic mineral potential”.
20. Lecture on the “Structure and tectonics of the Eastern Himalaya and Eastern Syntaxial Zone with special emphasis on the hazards/ disasters”.
21. Lecture on “The distribution of the fossils in various rock types representing the age range and paleoenvironment of deposition and paleocurrent directions”
22. A one-day workshop on Offshore mineral potentiality within the EEZ of India.
23. E-lecture series on “Offshore Mineral Potentiality within the EEZ of India”
24. Lecture delivered on fundamentals of Geology, Physical Geology, Minerals, Rocks, their formation and Geology as well as fossils of Spiti Valley.
25. Lecture on Origin of the Himalaya, Ophiolite, Ophiolitic Components etc
26. An online workshop on the theme “Landslide Causes and its Mitigation measures” was organised by Geological Survey of India, State Unit Sikkim.
27. Webinar on “Gold Prospects of Karnataka with special emphasis on Ajjanahalli Gold prospect, Chitradurga Schist Belt, Karnataka”
28. Webinar on “A case study of Exploration for Copper and Gold in Machanur area, Eastern Dharwar Craton.
29. Webinar on “Platinum-Group Elements (PGE) prospects of Karnataka with special reference to Nuggihalli Schist Belt, Karnataka”
30. Lecture on the topic “Singhbhum Craton: Geology and Mineralisation with special reference to Singhbhum Shear Zone (SSZ)”.
31. Lecture on introduction to Singhbhum Craton and its geological setup with a brief idea about various suites of rocks therein along with constituent

		<p>lithotypes and their respective chronological data. The tectonic processes involved in the evolution of the Singhbhumcraton was also discussed in chronological order to give an idea regarding progressive development and stabilization of the Singhbhumcraton. Various Archean components of the Singhbhumcraton viz. OMTG, OMG, SBG-I &amp; II, Iron Ore Group, SBG-III, other supracrustals, volcanics, siliciclastics etc. were discussed in detail.</p> <p>32. Online lecture on “Chhotanagpur Granite Gneissic Complex (CGGC): Geology and its metamorphic domains”</p> <p>33. “The Geology and Mineral Resources of Madhya Pradesh” was organised by Geological Survey of India State Unit Madhya Pradesh.</p> <p>34. Extrusion of aluminium alloys and Extrusion press showcase.(JNARDDC)</p> <p>35. Molten Metal Processing &amp; Quality of liquid aluminium. (JNARDDC)</p> <p>36. Bauxite deposits in India and its classification &amp; beneficiation. (JNARDDC)</p> <p>37. Principles of Bayer’s process and Unit operations / unit processes/ Fundamentals of Hall-Heroult Process/ Industry 4.0/ Utilization of aluminium industry wastes. (JNARDDC).</p> <p>38. Die design and simulation and Extrusion press showcase.</p> <p>39. Application of Circular Economy – Resource Efficiency (CE-RE) in aluminium industry</p> <p>40. Extrusion of aluminium alloys, die design and simulation</p> <p>41. Grain refinement of aluminium alloys</p>
4	Policy/Scheme Promotion	<p>1. Opened its first PradhanMantriBhartiyaJanaushadhi Kendra (PMBJK) at Malanjhand Copper Project (MCP), Madhya Pradesh to provide quality generic medicines at affordable prices to the people residing within township and surrounding villages. (HCL)</p>
5	Others	<p>1. NALCO: Promotion &amp; building awareness on Bharat kaAmrutMahotsavaon Home page of Company’s website/Banners put up at Mines &amp; Refinery Complex, Damanjodi (apart from continuing promotion at Township in Bhubaneswar &amp; S&amp;P unit at Angul)/ Incorporated branding of AmrutMahotsav in advt materials of NALCO.</p>
Total		About Fifty Seven activities were carried out during March to June, 2021.