

EFFECTIVE INDUSTRY-ACADEMIA PARTNERSHIP: OPPORTUNITIES AND CHALLENGES

**DECEMBER 12 & 13, 2019** 

# Souvenir



राष्ट्रीय प्रौद्योगिकी संस्थान मेघालय
NATIONAL INSTITUTE OF TECHNOLOGY MEGHALAYA
(An Institute of National Importance)
Shillong, Meghalaya-793003, India



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## **PROGRAMME SCHEDULE**

Industry – Academia Conclave 2019 VENUE: State Convention Centre, Shillong (12.12.2019) Hotel M-Crown, Shillong (13.12.2019)

	Date: - 12 <sup>th</sup> December, 2019	
Time	Program	
03.30 PM – 04.30 PM	Registration of Participants with Welcome Tea	
04.30 PM – 05.30 PM	Inaugural function of Industry-Academia Conclave-2019	
05.45 PM – 06.15 PM	Key Note Speech by <b>Er. Ashok Basa</b> , Past President, the Institution of Engineers, (India)	
06.30 PM – 07.45 PM	Cultural Function	
08.00 PM – 09.30 PM	Conclave Dinner at State Convention Centre	
	Date: - 13 <sup>th</sup> December, 2019	
09.30 AM – 09.55 AM	Presentation on NIT Meghalaya by <b>Prof. Ayon Bhattacharjee,</b> Dean (R&C)	
10.00 AM – 10.30 AM	Tech Talk-1 presentation by Prof. S.K. Patel, Dean (AA), NIT Rourkela.	
10.30 AM – 10.45 AM	Tea Break	
	Panel Discussion -1 (10.45 AM – 11.30 AM)	
Theme	Name of the Panelist	
	1 Mr. Debasis Patnaik  Vice President, Bhubaneswar Power Pvt Ltd. (100% subsidiary of Tata Steel Ltd.)	
	2 Mr. Sunil Rattawa Asst. Executive Director (Technical), Dalmia Cement	
	3 Mr. Jagadish Patra  AVP, Aditya Aluminium, Hindalco Industries	
Role of Industries in Enhancing the Quality of Technical Education	4 Mr. A.R. Nayak Sr. General Manager, IMFA	
recrifical Education	5 Mr. Rajendra Jena  Deputy Director, NECTAR	
	6 Mr. Mahesh Nayak  **DGM, NTPC, Korba***	
	7 Prof. Ayon Bhattacharjee (Rapporteur)  Dean (R&C), NIT Meghalaya	
11.35 AM – 12.00 PM	Tech Talk-2 presentation by Dr. Tarapada Dash, Vice President, TRL Krosaki	

	Panel Discussion -2 (12.00 PM – 12.45 PM)
Theme	Name of the Panelist
Roadmap to Strengthen Collaboration between Industries and Academia	1 Mr. Subash Mishra  Vice President (PP), Bhusan Energy
	2 Mr. Abhiji Baburao Bandi Vice President, Utkal Alumina International Ltd.
	3 Mr. Kamta Prasad Gupta  GM, Aditya Aluminium, Hindalco Industries
	4 Mr. Nihar Kanti Rout  JGM (Fire & Safety), PPL  5 Mr. Radha Krishna Jha
	<ul> <li>5 Mr. Radha Krishna Jha</li> <li>Chief Manager (Human Resource), JK Paper</li> <li>6 Mr. P.M.G.V. Srinivas</li> </ul>
	AGM, NTPC, Kaniha  7 Prof. Gayadhar Panda (Rapporteur)
	Dean (AA), NIT Meghalaya  Tech Talk presentation-3 by Dr. Kiran Kanti Panda,
12.50 PM – 01.15 PM	Joint General Manager & Head (HSE), Essar Steel
	Lunch Break (01.15 PM – 02.30 PM)
02.30 PM – 02.55 PM	<b>Tech talk-4 presentation by Prof. M.K. Dutta,</b> HoD, Humanities and Social Science, IIT Guwahati
	Panel Discussion -3 (03.00 PM – 03.45 PM)
	1 Mr. Ambika Panda GM (CPP), NALCO, Angul
	2 Mr. Alok Rath  GM, Udyogi Plastics Ltd.
Industry Academia Synergy	3 Mr. S.D. Sharma  JGM (U&E), IFFCO
for Skill based Education and	A NACIDATAL COLOR
for Skill based Education and Employability Enhancement	4 Mr. Hari Abinash Sahoo  Chief Manager, PPL  5 Mr. Abbishek Mohan Sharma
	Chief Manager, PPL  5 Mr. Abhishek Mohan Sharma Plant Manager, Hindustan Cocacola Beverages Pvt Ltd.  6 Mr. M. Sakthivel HR Manager, Vedanta Ltd. Jharsuguda
	Chief Manager, PPL  5 Mr. Abhishek Mohan Sharma Plant Manager, Hindustan Cocacola Beverages Pvt Ltd.  6 Mr. M. Sakthivel HR Manager, Vedanta Ltd. Jharsuguda  7 Prof. Harish Chandra Das (Rapporteur) Dean(FW) NIT Meghalaya, Shillong
	<ul> <li>Chief Manager, PPL</li> <li>Mr. Abhishek Mohan Sharma</li></ul>

		Panel Discussion -4 (04.30 PM – 05.15 PM)
	1	Mr. T.M. Prakash  Vice President (HR & IR), Utkal Alumina, Tikiri
	2	Dr. Malay Kumar Pradhan General Manager (F&B), OSDMA
	3	Mr. M.K. Joshi  Asst. Vice President, Shree Cement Ltd.
Industry Academia	4	Mr. Kedar Ranjan Pandu  GM (O&M), TTPS, NTPC
Interface-Bridging the Gap	5	Mr. Nirupam Chaudhuri Regional Director, East NASSCOM
	6	Mr. A. S. Prasad  Deputy Executive Director, Essar Steel, Cuttack
	7	Mr. Pulin Kumar Sahu  DGM Corporate Affairs, Jindal Steel & Power Ltd.
	8	Dr. Debasish Mishra (Rapporteur)  IIM Shillong
05.20 PM – 05.45 PM		<b>Tech Talk Presentation-6 by Dr. Malay Kumar Pradhan</b> General Manager (F&B), OSDMA
05.45 PM – 05.55 PM		<b>Vote of Thanks by Prof. H.C. Das,</b> Professor & Dean (FW), NIT Meghalaya, Chairman, Industry-Academia Conclave-2019
		High Tea (06.00 PM – 06.30 PM)
07.30 PM – 09.30 PM		Dinner at Hotel M-Crown



Conrad K. Sangma Chief Minister MEGHALAYA



Office : PABX :

0364-2224282

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0364-2227913

(R) 2522752

#### MESSAGE

It gives me immense pleasure to know that the National Institute of Technology, Shillong will organise its first-ever Industry-Academia Conclave on "Effective Industry-Academia Partnership" on the 12<sup>th</sup> and 13<sup>th</sup> of December this year.

Despite being a new Institute in the State the National Institute of Technology, Shillong has been able to make its mark as one of the most reputed institutes of the North East region. I am certain that Conclave with its aim to bridge the gap and to foster industry-academic collaboration will explore the issues at hand through the two-day discussions and deliberations that will result in an improved quality of technical education, that meets the needs of the industry, further adding value to the lives and future of our students.

I commend the efforts of the National Institute of Technology, Shillong and I wish the Conclave a grand success.

(Conrad K. Sangma)



#### SHRI SNIAWBHALANG DHAR, MINISTER

Transport, Commerce & Industries, Community & Rural Development, Soil and Water Conservation Meghalaya, Shillong.



(Office) - 0364-2224576 (Mobile) - 9612161224

Room No. - 413

D. O. No
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Date .....

#### MESSAGE

On the very outset, I would like to congratulate NIT Meghalaya for organizing this Industrial-Academia Conclave on "Effective Industry-Academia Partnership; Opportunities and Challenges". In spite of being a new Institute, the initiatives taken by the Institute is commendable. It is delightful to see that the faculty members, staffs and the students of this Institute are really working hard for the betterment of the society. As we all know NIT is one of the Nationally important Institute of the Country and every year many talented, young, innovative Engineers graduated from this Institute. I believe this event will fulfil its main aim to bring the Industry and academic together on a common platform. This event will focus on realigning the technical education adequately to meet the needs of the industry, sharing the experiences and expertise between institutions and Industry for mutual benefit, to acquaint faculty members with the current industrial practices and their integration in technical education for effective implementation. A part from these, the topics that to be discussed to identify sustainable R&D programme in association with academic giving rise to synergies, to design interfaces for sustainable research, development, awareness etc. Once again I congratulate all the NIT Meghalaya fraternity and Industry participations for making this event a grant success.

(Sniawbhalang Obar )

Commerce & Industries

Meghalaya, Shillong



#### Lahkmen Rymbui, MINISTER

Education, Forest & Environment and Border Area Development, Government of Meghalaya.



Rilang Building, Room No. 307 Phone: Office - 0364-2224283

PABX - 2201

Mobile - 9436106092

D. O. No.....

Date 4th December, 2019

#### MESSAGE

On the very outset, I would like to congratulate NIT Meghalaya for organizing this Industrial-Academia Conclave on "Effective Industry-Academia Partnership; Opportunities and Challenges". In spite of being a new Institute, the initiatives taken by the Institute is commendable. It is delightful to see that the faculty members, staff and the student of this Institute are really working hard for the betterment of the society. As we all know NIT is one of the Nationally important Institutes of the Country and every year many talented, young, innovative Engineers graduates from this Institute. I believe this event will fulfil its main aim to bring the industry and academics together on a common platform. This event will focus on realigning the technical education adequately to meet the needs of the industry, sharing the experience and expertise between institution and industry for mutual benefit, to acquaint faculty members with the current industrial practices and their integration in technical education for effective implementation. Apart from these, the topics that to identify sustainable R&D programme in association with academic giving rise to synergies, to design interface for sustainable research, development, awareness etc. Once again I congratulate all the NIT Meghalaya fraternity and Industry participations for making this event a grant success:

May God bless you.

(Lahkmen Rymbui)



#### Message from BOG-Chairman

On the very outset, I would like to congratulate NIT Meghalaya for organizing this Industrial-Academia Conclave on "Effective Industry-Academia Partnership; Opportunities and Challenges". In spite of being a new Institute, the initiatives taken by the Institute is commendable. It is delightful to see that the faculty members, staff and the students of this Institute are really working hard for the betterment of the society. As we all know NIT is one of the nationally important Institute of the Country and every year many talented, young, innovative engineers graduate from this Institute. I believe this event will fulfil its main aim to bring the industry and academics together on a common platform. This event will focus on realigning the technical education adequately to meet the needs of the industry, sharing the experience and expertise between institution and industry for mutual benefit, to acquaint faculty members with the current industrial practices and their integration in technical education for effective implementation. Apart from these, the topics that to be discussed to identify sustainable R&D programme in association with academic giving rise to synergies, to design interfaces for sustainable research, development, awareness etc. Once again I congratulate all the NIT Meghalaya fraternity and Industry participations for making this event a grant success.

**Shri Sajjan Bhajanka** Chairman, BOG, NIT Meghalaya



#### **Director's Message**

Academia-Industry collaboration has always been a topic of great interest around the world. In any economy, innovation is an essential tool for job creation and is a primary driver in solving daily life problems. Industry Academia Conclave aims at fostering our ever-improving relations with the industry. The objective of the Conclave is to bring together experts from the industry R&D organizations to discuss prime issues concerning industry and academia based on current societal requirement. We seek to explore avenues of possible fusion pertaining to research and consultancy, as well as try to find plausible solutions to bridge corporate expectations with academic training.

With the advent of globalization and opening up of Indian economy to outside world, competition among industries have become stiff. To solve their engineering problems they look up now to engineering institutions. Similarly, there is an urgent need to prepare engineering students for jobs in multinational companies, by exposing them to newer technologies and engineering methodologies. These objectives can only be achieved well by bridging the gap between industry and the academic institutions. Better interactions between technical institutions and industry is the need of the hour. This will have great bearing on the engineering curriculum, exposure of the engineering students to industrial atmosphere and subsequent placement of young graduating engineers in industries across the country.

Industries and institutes have been collaborating for over a century, but the rise of a global knowledge economy has intensified the need for strategies partnerships. The institutes are imparting the basic knowledge and skill, but the Industry-Institute Interactions will enable to undertake research by staff and student relevant to the industry. With several layers of collaboration being built by the government to develop the Make in India program, the manpower needs have to be fulfilled in order to witness the required development. Though availability of manpower is abundant in India, well-equipped manpower with employability skills is the need of the hour. There is a need to create avenues for a close academia and industry interactions through all the phases of technology development, starting from conceptualizing to commercialization.

National Institute of Technology Meghalaya is striving for research-driven undergraduate and postgraduate education. Our objective is to create an education system with multifacet outcomes including research, entrepreneurship, technical leadership and above all, responsible citizenship.

I convey my best wishes to the team of faculty from NIT Meghalaya for the upcoming Industry-Academia Conclave being held during December 12-13, 2019.

> Prof. Bibhuti Bhusan Biswal Director, NIT Meghalaya

## **About Organizing Institute**

#### The Institute

The National Institute of Technology (NIT) Meghalaya (established in 2010 under the NIT Act 2007 as an Institute of National Importance) is one among the 31 NITs in India. NIT Meghalaya is ranked 67th position by NIRF, 56th position by Business World and 28th position under Top 35 Government Engineering Colleges by India Today in 2019. The Institute is presently operating from a temporary campus at Laitumkhrah, Shillong, India. Its permanent campus is under development at Cherrapunjee. The Institute has five Engineering Departments: Mechanical, Civil, Electrical, Electronics & Communication and Computer Science & Engineering; three Basic Science Departments and Humanities & Social Sciences.

#### The Vision

A Centre of Excellence vibrant with academic activities and bubbling with youthful creative energy, making significant contribution to the World of Knowledge and Technology and to the Development of the State, the Region and the Nation.

#### The Mission

- To impart quality education in the fields of Engineering, Science and Technology at Undergraduate as well as
  Postgraduate levels with special attention to encourage innovation and creativity in these fields in a clean and
  healthy environment.
- To engage in creation of knowledge and development of technologies through effective research programs.

#### **Guiding Principles**

- Every entity deserves respect; responsiveness, fairness and transparency are keys to it.
- \* Role of an academic institution is to enable unhindered exchange of knowledge.
- True education promotes the spirit of enquiry.
- Nurturing of talent and promotion of creativity must for achieving excellence.
- Learning is a lifelong process.
- Examination and evaluation processes are tools to enable better learning, not the ends.
- Every effort should be made to take the benefit of science and technology to the poor and underprivileged.
- Rural development is must for balanced development of the nation.
- Protection of the environment must get priority.

#### **Aim of the Industry Academia Conclave**

Industry-Academia Conclave on "Effective Industry-Academia Partnership: Opportunities and Challenges" will be held at NIT Meghalaya, Shillong. India on 12th and 13th December, 2019. it has been a concern to all of us that the engineering graduates are not industry ready and a gap exists between the need of the real world and the recent performance of the academic institutions. Due to lack of understanding of this gap, no remedial action is instituted for bridging the gap. In order to bring the industry and academics together on the common platform for discussing the issues with better understanding and bridge the gap between industry and academics, it is aimed to conduct an Industry-Academia conclave at NIT Meghalaya. The main aim of this conclave is to invite the experts from industries and academia to discuss the key issues for improving the quality of the technical education to meet the current needs of the industries, sharing of experience & expertise between organizations for mutual benefits, integrating inputs from industries with teaching learning processes for developing the industrial skill of the students.

### **Major Topics to be Discussed**

- Bridging the gap between industry and institute.
- Realigning the technical education adequately to meet the needs of the industry.
- Sharing the experience and expertise between institution & industry for mutual benefit.
- Integration of inputs from industry with teaching learning processes and making the students industry ready.
- To acquaint faculty members with the current industrial practices and their integration in technical education for effective implementation.
- To identify potential areas for mutual participation of industry and academia giving rise to synergies.
- To identify sustainable R&D programme in association with academic institutions.
- · To explore the opportunities for collaboration in joint development of curriculum and pedagogy.
- To design interfaces for sustainable research, development, awareness, capacity building and CSR initiatives.



TEQIP is a World Bank assisted quality enhancement scheme aimed at overall development of technical education in India. Technical Education Quality Improvement Program (TEQIP), is one of the most coveted projects of the Minister of Human Resources Development (MHRD) Government of India. This program aims at holistic improvement of Technical Education in some Institutes so that they are able to provide high quality equipment, resources and facilities to the students, staff, and faculty. The implementation of this program has enabled the development of world class facilities in several institutes and as such the students are better trained for employment in core industries. The program envisages to bring technical education in India at par with those in Europe and America so that the conditions laid down in The Washington Accord are fulfilled and the degrees awarded in these institutes are recognised internationally.

NIT Meghalaya is one of the focussed institutes under TEQIP and is earmarked to receive a fund of rupees fifteen crores. Under this programme, NIT Meghalaya has procured state of the art equipment for the benefit of its students and faculty so that teaching and research can be done at the highest levels. The faculty, staff and the students have been trained through workshops, hands-on trainings, conferences and seminars through TEQIP funds. Due to the advanced instruments that have been made available under TEQIP and the expertise available in terms of man power, NIT Meghalaya is able to undertake critical jobs for the Government of India, Defence forces and the Industry.

The TEQIP team of NIT Meghalaya is headed by the Hon'ble Director of the Institute Prof B. B. Biswal, who is the Institutional Project Director.

#### The other members of the TEQIP team are:

1. TEOIP Coordinator: Prof. Ayon Bhattacharjee

2. Nodal Officer Procurement: Dr. D. K Sarma 3. Nodal Officer Academic: Dr. Rangababu P 4. NBA Coordinator: Prof. G. Panda 5. Start-up Coordinator: Prof. H.C. Das

6. GATE Coordinator: Dr. Rajat Subhra Das

7. EAP Coordinator: Dr. M.L.Patton

8. TEOIP Assistant: Mrs. Evadaline Lyngdoh Mawlieh

Ms. Lucky Das

Mr. Bidyut Bikash Atreya

## Some important consultancy jobs undertaken by NIT Meghalaya

Name of Consultancy	Vendors	Consultancy Amount
Vetting of DPR "Greater Sohra water supply" scheme for PHE, Govt. of Meghalaya	Govt. of Meghalaya	18,75,000.00
Vetting of DPR "Laying of new feeder mains under Tura Phase- I&II water supply scheme, Govt. of Meghalaya	Govt. of Meghalaya	26,24,250.00
Structural design of OTM ACCN for ALH SQN (PH-11) at Dinjan Miltary station (Job no: E/1994)	MES Shillong	6,90,000.00
Testing of Boulders ,concrete cubes , water. and cement for CPWD Shillong.	CPWD Shillong.	4,33,945.00
Vetting of DPR "Construction including mettaling and black topping of Pynursla- Latangriwan road towards Mawlynnong", Govt. of Meghalaya	Govt. of Meghalaya	22,50,000.00
Vetting of DPR "Upgradation of Mawsmai- Shella road from km 8/00 (Laittyra village) to km 15/500 (Kynrem falls), Govt. of Meghalaya	Govt. of Meghalaya	11,62,500.00
Testing of Boulders for CPWD Shillong.	CPWD Shillong	5,75,250.00
Testing of Boulders ,coarse agg. and cement for CPWD Shillong.	CPWD Shillong	2,88,514.00
Third quality control for IIM construction CPWD, Shillong	CPWD, Shillong	2,26,452.00
Testing of boulder, water for CPWD, Shillong IIM Shillong	CPWD, Shillong	3,43,321.00
Testing of Boulder for CPWD, Shillong	CPWD, Shillong	5,75,250.00
Testing of boulder for CPWD, Shillong	CPWD Shillong	2,99,000.00
Vetting of structural design for NEIAH, Shillong	NEIAH, Shillong	1,47,500.00
Testing of Boulders ,coarse agg. and cement for CPWD Shillong.	CPWD Shillong.	5,01,500.00
Design and Estimate for the inclined pitch roof slab roof "Sylvan House Building".	Forest Dept. Govt. of Meghalaya	1,01,000.00
Technical Study of firing thermal Power plant	Vedanta Limited	20,00,000.00
Vetting of Drawing BF Gas Fired for Getting IBR Approval	Jindal Steel & Power Ltd	14,16,000.00
CFBC BOLLER CAD MODELLING & CFD ANALYSIS	ACC Limited	5,00,000.00
(a) Submission of a report on the cause of failure of Coal Bunker (b); Vetting of structure design of the Coal bunker supplied by ARK Engineering & Power Consultants PVT. Ltd	EMAMI	3,54,000.00
Vetting of Augmentation of 132/33 kV Mawlai Substation from (3 x 120) MVA to (3 x 50) MVA along with re-engineering of 133 kV bus bar	Govt. of Meghalaya	44,25,000.00

## **Speaker Details**

#### **Academic Speakers**



**ER. ASHOK KUMAR BASA** Past President The Institution of Engineers, (India)



**Corporate Speakers** 

MR. MANISH KHARBANDA **Executive Director** Jindal Steel & Power Ltd.



PROF. SAROJ KUMAR PATEL Professor & Dean (AA) National Institute of Technology



**DR. MALAY KUMAR PRADHAN** General Manager (F&B) OSDMA, Govt. of Odisha



**PROF. MRINAL KANTI DUTTA** Professor Indian Institute of Technology Guwahati



MR. BIBHU PRASAD MISHRA Vice President Jindal Steel & Power Ltd.



Professor & Dean (R&C) Member, Industry-Academia Conclave-2019



DR. TARAPADA DASH Vice President (Corporate Services) TRL Krosaki Refractories Limited



DR. KIRAN KANTI PANDA Sr. GM, Head (HSE) Essar Steel Ltd.

## **Panel Member Details**

#### Panel Theme-1: Role of Industries in Enhancing the Quality of Technical **Education**



MR. DEBASISH PATTNAIK Vice President Bhubaneswar Power Pvt LTD. (100% subsidiary of TATA Steel



**MR. SUNIL RATTAWA** Assistant Executive Director Dalmia Cement Bharat limited (Meghalaya)



MR. JAGADISH PATRA Assistant Vice President Hindalco Industries Limited (Unit- Aditya Aluminium)



MR. AMIYA RANJAN NAYAK DGM, (Mechanical), Power plant Indian Metals & ferro Alloys Limited.



MR. RAJENDRA JENA **Deputy Director** North East Centre for Technology Application and Reach (NECTAR)



MR. M. K. NAYAK Dy. General Manager(DGM) NTPC Korba



**PROF. AYON BHATTACHARJEE** Professor & Dean (R&C) Member, Industry-Academia Conclave-2019 (Rapporteur)

#### Panel Theme-2: Roadmap to Strengthen Collaboration between Industries and **Academia**



MR. SUBHASH MISHRA

Vice President & Factory Manager Bhushan Energy Limited



MR. ABHIJEET BABURAO **BANDI** 

Vice President (Process) Utkal Alumina International Ltd. (100% subsidiary of Hindalco Industries Ltd., Aditya Birla Group)



MR. KAMTA PRASAD GUPTA

General Manager Hindalco Industries Limited (Unit- Aditya Aluminium)



MR. NIHAR KANTI ROUT

Jt. GM – Fire & Safety Paradeep Phosphate Ltd.



MR. RADHA KRISHNA JHA

Chief Manager HR J.K. Paper Limited



MR. PMGVSRINIVAS

AGM (HR RLI) NTPC, Talcher, Kaniha



**PROF. GAYADHAR PANDA** 

Professor & Dean (AA) Member, Industry-Academia Conclave-2019 (Rapporteur)

#### Panel Theme-3: Industry Academia Synergy for Skill based Education and Employability Enhancement



MR. AMBIKA PRASAD PANDA General Manager (CPP) NALCO CPP, Angul



MR. ALOK RATH General Manager Udyogi Plastics



MR. S.D. SHARMA Jt. General Manager (Elect. And Utility) IFFCO Paradeep



MR. HARI ABINASH SAHOO Chief Manager (Production) Paradeep Phosphate Ltd.



MR. ABHISHEK MOHAN **SHARMA** Plant Manager Hindustan Coca-Cola Beverages Pvt Ltd, Khurda



MR. M. SHAKTIVEL Chief People Officer Vedanta Limited, Jharsuguda



**PROF. HARISH CHANDRA DAS** Professor & Dean (FW) Chairman, Industry-Academia Conclave-2019 (Rapporteur)

#### Panel Theme-4: Industry Academia Interface-Bridging the Gap



MR. T. MINNA PRAKASH Vice President HR & IR Utkal Alumina International Ltd. (100% subsidiary of Hindalco Industries Ltd., Aditya Birla Group)



**DR. MALAY KUMAR PRADHAN** General Manager (F&B) OSDMA, Govt. of Odisha



MR. M. K. JOSHI Astt. Vice President (P&A) Odisha Cement Plant (A Unit of Shree Cement Ltd.) Cuttack (Odisha)



MR. KEDAR RANJAN PANDU General Manager(O&M) Talcher Thermal Power Station, NTPC Ltd.



MR. NIRUPAM CHAUDHURI Regional Director - EAST NASSCOM



MR. A.S. PRASAD Deputy Executive Director Essar Steel



MR. PULIN KUMAR SAHU **DGM Corporate Affairs** Jindal Steel & Power Ltd.



**DR. DEBASISHA MISHRA** Assistant Professor IIM Meghalaya, Shillong (Rapporteur)



#### NORTH EAST CENTRE FOR TECHNOLOGY APPLICATION AND REACH (NECTAR)

NECTAR is an autonomous society, set up under Department of Science & Technology, Government of India with overall mandate for implementation of various schemes and projects ensuring applications of appropriate S&T technologies for development of North East Region. The focus sectors of NECTAR are:

Agro Processing: NECTAR is putting optimum efforts to support the local producers by setting up small scale processing units along with tying up the marketing linkages. NECTAR has supported setting up of pineapple processing, king chillie pickle making unit and beekeeping activities in various NE states.







Bamboo Applications: The Centre has contributed major interventions on developments of Bamboo Technology which broadly categorised into its related technologies and products are: Composites & Wood Substitutes-bamboo boards. timber, flooring etc., Construction & Structural Applications- Bamboo composite building with flawless architectural design., Food & Agro-Processing-bamboo shoot, pickle etc., Industrial Products-plastic composites, sanitary napkins, charcoal, activated carbon, furniture, etc., Product Applications - Small Enterprise (stick, sliver, skewer, mat making, playhouses etc.), Adapting/adopting processing Machinery & Technology & scaling up of CFCs and energy production through gasification.

Geospatial and Communication Technology Applications: NECTAR has developed two prominent mapping and surveying platforms in the form of 3D Digital Terrain Models and High Precision UAV systems for high resolution mapping solutions to cater micro level to high levels planning in security & developmental activities. Using the above platforms the Centre has generated 3D digital maps for large extent of geographical areas of NE region along with very high precision data of Brahmaputra Embankments, Ganol River catchment (Meghalaya) and other related projects. Scope and utility of Remote sensing Technology(RST) for agriculture crop analysis has been developed by providing services to various clients. Flood modelling of various rivers by the use of necessary available data sets were carried out. The Centre has implemented various projects based on. Software Defined Radios(SDRs) technology and low cost wireless mesh net communication systems for internal security, disaster related applications, establish telemedicine and CCTV facilitates in North Eastern areas.







Employment & Livelihood Generation: About 30 million man-days per annum has been generated by NECTAR in various activities especially in bamboo mat making used for bamboo boards in bamboo house construction. Other activities like agarbatti sticks, furniture and other allied industrial activities etc., also produced huge employment in the sector.



NECTAR has supported in livelihood generation activity by providing 1500 upgraded bee hives to various rural communities in Nagaland for honey production, up gradation of looms for weaving activity in Manipur to provide opportunity for women to become self sustainable to achieve better social and economic situation.



New Initiatives: Possibility of Bamboo Fibre extraction technology and value addition of other natural fibre extraction such as Banana, Pineapple, Alovera etc. Technology Outreach Programmes on Remote Sensing Technology (RST) for North Eastern students, Communication service for rural/remote areas in NE with Phone and Wi-Fi Connectivity.

North East Centre for Technology Application and Reach 2nd Floor, Vishwakarma Bhawan, Shaheed Jeet Singh Marg, New Delhi-110016 Phone: +91-11-42525646/666/651

North East Centre for Technology Application and Reach Meghalaya State Housing Financing Co-operative Society Complex, Upper Nongrim Hills, Shillong-793003, Meghalaya



Crafting the Digitalization of Technoholix (An ISO 9001: 2015 Certified Company)

EMBESYS TECHNOLOGIES is an India based company with a strong customer network and Partnerships with independent OEMs and Technology suppliers, started with a vision of being professionally managed, knowledge based, innovative and committed to customer satisfaction Company.

The technology platform and components of our solutions is the product from the families of MNC like National Instruments, OPAL-RT, Dassault Systems Solid Works, 3D Printers , Optical 3D Scanner / Industrial CT Scanner and Data Imaging Software. As an entity, we vitally focus on Developing Top-notch Research Laboratories and Centre of Excellence in collaboration with the technology partner having PAN India presence. The Group of technocrats we have is always putting their matchless effort & never compromised on the quality of the services provided to our customer.

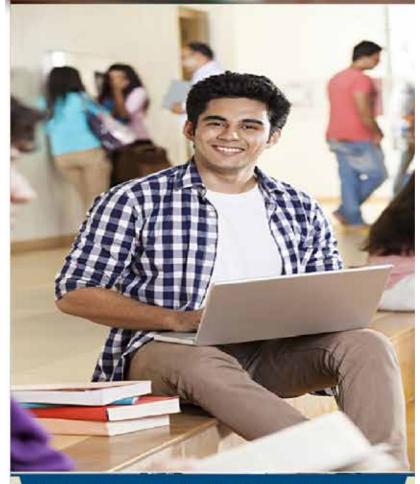
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## **Participating Industry Details**

S. No.	Industry Name	Participant Name		Address
1	United Eco Care	Mr. Manik Lal Gosh Director 9437974696 maniklal_bristy@rediffmail.com		United Eco Care Cuttack Odisha
2	Tata Refractories Limited Krosaki	Dr. Tarapada Dash Vice President 9937667900		TRL Krosaki Belpahar, Dist- Jharsuguda, Odisha
3	Aditya Aluminium, Hindalco Industries Limited.	Abinash Panigrahi Asst. Manager 8018043114 Jagadish Patra AVP 8018043079	Kamta Prasad Gupta GM 7077743085	Aditya Aluminium, Hindalco Industries Limited. At/PO-Lapanga, Dist-Sambalpur. Odisha
4	NTPC, Kaniha	Sh. P M G V Srinivas, AGM(RLI/EDC) pmgvsrinivas@ntpc.co.in mobile no: 9440918352		NTPC, Kaniha Kaniha, Talcher Odisha
5	IMFA Ltd.	Mr.A.R.Nayak DGM 9937299414 arnayak@imfa.in	Mr.D.P. Mohanty DGM 9937299388 debamohanty@imfa.in	IMFA Ltd. Choudwar, Cuttack Odisha
6	IFFCO Ltd.	Mr. AMOL LOHIYA  DM(Elect)  Mr. S D Sharma  JGM(U&E)		IFFCO Ltd. At – Musadiha, PO- Paradeep, Dist- Jagatsinghpur, Odisha
7	Hindustan Coca-Cola Beverages Pvt Ltd, Khurda	Mr. Abhisekh Sharma, Plant Manager 09687809581 abhsharma@coca-cola.in		Hindustan Coca-Cola Beverages Pvt Ltd, Jatni, Dist: Khurda Odisha
8	M/s. Paradeep Phosphate Ltd	1. Nihar Kanti Rout - Jt. GM – Fire & Safety 2. Amit Kumar Verma- Jt. GM- Production 3. Hari Abinash Sahoo- Chief Manager (Production)		M/s. Paradeep Phosphate Ltd At/PO:PPL Township,Paradeep, Dist- Jagatsinghpur, Odisha
9	J.K.,Paper Limited,unitJKPM	Name: Radha Krishna Jha Chief Manager 8335066881		J.K.,Paper Limited,unitJKPM Dist: Rayagada Odisha
10	Bhushan Energy Limited	Mr. Subhash Mishra VP (PP) 7077756925		Bhushan Energy Limited Talabahal, Odisha
11	Odisha Cement Plant (A Unit of Shree Cement Ltd.)	M. K. Joshi Astt. Vice President (P&A) Mob: 09214037431		Odisha Cement Plant (A Unit of Shree Cement Ltd.) Cuttack (Odisha)

S. No.	Industry Name	Participant Name		Address
12	Odisha Power Generation Corporation Limited (OPGC)	Mr. Sudhakar Swain, AGM (Electrical) Contact No.: +919338715426 Email ID: sudhakar.swain@opgc.co.in		Odisha Power Generation Corporation Limited (OPGC) BANHARPALI, JHARSUGUDA.
13	M/s Jindal Steel & Power Ltd.	Mr. Manish Kharbanda Executive Director Mr. Bibhu Prasad Mishra Vice President bpmishra@angul.jspl. com	Mr. Pulin Kumar Sahu DGM Corporate Affairs pulin206@yahoo.com	M/s Jindal Steel & Power Ltd. At-Nisha, Po-Jindal Nagar, Dist- Angul, Odisha
14	Utkal Alumina International Limited	TM Prakash, Vice President HR & IR 7077708130 Mr. Abhijeet Baburao Band	di, Vice President	Utkal Alumina International Limited At/Po:tikiri, Dt:Rayagada Odisha
15	M/s CPP Nalco Ltd.	Mr. Ambika Panda GM (CPP) Nalco 9437024772		M/s CPP Nalco Ltd. At/PO-Nalco Nagar, Dist-Angul Odisha
16	Ultratech Cement	Ashis Pal HR Manager 9090099503		Ultratech Cement At: Adra, Dt: Jharsuguda
17	Vedanta Limited, Jharsuguda	M. Shaktivel Head HR Vedanta Limited, Jharsuguda 99370 43182		Vedanta Limited, Jharsuguda Odisha
18	North East Centre For Technology Application And Reach (NECTAR)	Rajendra Jena Dy. Director rajendra@nectar.org.in Joseph Toshienla Jamir Project Officer		North East Centre For Technology Application And Reach (NECTAR) Upland Rd, Near Phe Water Tank, Nongkynrih, Laitumkhrah, Shillong, Meghalaya 793003
19	Britannia NE Factory	1. Sandeep Pawar Maintenence Manager 6001443425	2. Abhisekh Pandey Production Manager 9973159321	Britannia NE Factory
20	Swami Vivekanand National Institute of Rehabilitation Training and Research (SVNIRTAR)	Ranjan Das Lecturer ME 8249232027		SVNIRTAR, Cuttack
21	Bhubaneswar Power Pvt Ltd.	Mr. Debasish Pattnaik Vice President deb.patnaik@gmail.com 7894433678, 9047078093		Bhubaneswar Power Pvt Ltd. 4th Floor, IPICOL House (Main Building) Janpath, Bhubaneswar, Odisha – 751022
22	Essar Steel Ltd.	A.S. Prasad (Dy. ED) +91 7381007000		Essar Steel Ltd. Udayabhatta, Paradeep, Dist-Jagatsinghpur, Odisha

S. No.	Industry Name	Participant Name	Address
23	Balasore Alloys Ltd	Mr Siddheswar Nayak Asst Manager (safety) Mobile:9937675474 / 07381096047	Balasore Alloys Ltd Balgopalpur, Dist- Balasore, Odisha
24	Grasim Industries Limited, Chemical Division, Ganjam (Odisha),	Mr. Prabin Narayan Dash Manager, CSR Corporate Affair & Corporate Communications +91 94370 75237	Grasim Industries Limited, Chemical Division, Ganjam (Odisha),
25	NTPC-SAIL Power Company Limited	Rajiv Barkataki Sr. Mgr(HR) NTPC-SAIL Power Company Limited 91 94374 90612	NTPC-SAIL Power Company Limited At – Administrative Building (Power Plant), PO- RSP Complex, Sundargarh, Odisha
26	Dalmia Cement (Bharat) Ltd.	Mr. Sunil Rattawa Asst. Executive Director (Technical) Rattawa.sunil@dalmiacement.com	Dalmia Cement (Bharat) Ltd. Meghalaya
27	TTPS, NTPC	Kedar Ranjan Pandu GM(O &M) krpandu@ntpc.co.in	TTPS, NTPC At/PO-Talcher Thermal, Dist- Angul, Odisha
28	Spectrum Coal and Power Ltd Talcher Plant	Mr. S.N. Mishra AGM 7894417859	Spectrum Coal and Power Ltd. Talcher Plant At: Talcher Odisha
29	NTPC Korba	Mr. Mahesh Nayak DGM Mr. M.K. Sonkar Sr. Manager	NTPC Korba Address: P.O. Vikas Bhawan, Jamanipali-495 450,Dist. Korba, Chattisgarh
30	Hirakud Smelter Hindalco Industries		Durga Madhab Mohapatra durga.mohapatra@adityabirla.com
31	JSL Stainless Ltd.	Mr. T.K. Mishra, AVP, EHS 9938250108 tushar.misra@jindalstainless.com	JSL Stainless Ltd. At/PO- Kalinga Nagar Industrial Complex, Dist – Jajpur, Odisha
32	HPCL Jatni LPG Plant Bhubaneswar Odisha	Arun Kumar Nayak Sr Plant Manager Cell: 9900722302	HPCL Jatni LPG Plant Bhubaneswar Odisha
33	UDYOGI Plastics Pvt Ltd.	Alok Rath General Manager alok@udyogi.net +91 93388 23141	UDYOGI Plastics Pvt Ltd. Bhubaneswar Odisha
34	TCG Life sciences	Mr. Anirban Mitra Head HR & Admin	TCG Life Sciences, Kolkata
35	National Projects Construction Corporation Limited	Mr. Krishna Swain Manager Mr. Sumit Pal Manager	National Projects Construction Corporation Limited

## List of Advisory and Organising Committee Members of **Industry Academia Conclave-2019**

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). Scholar, ME
). Scholar, ME
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#### **MEGHALAYA**

Located in the North Eastern region of the country, Meghalaya (Abode of the clouds) is a hilly state marked by massive forest cover, lush greenery, bio-diversity and fresh cool breeze that distinguishes it from the other plain areas of the country. With an estimated population of about 3,211,474 (2016) the state covers an area of about 22,430 square kilometres (approx.) with Shillong as its capital and shares an international boundary with Bangladesh. Home to the Khasis, Jaintias and Garos who inhabit the eastern, western and central parts, the state is well known for its distinctive culture and social practises. The state is made famous by its indigenous diversity and culture that has been manifested in the form of food habits, handicrafts and music. More significant however is how the tribal group has maintained a matrilineal system where the status of women has been safeguarded and uplifted throughout the past years by making them custodians of ancestral property and rights. Although a majority of the population have embraced Christianity yet the traditional beliefs with its foundation firmly based on the worship of nature still finds place in the hearts of the people who are striving endlessly to preserve the natural surroundings and beauty that defines the state.

#### How to reach Shillong

Guwahati (Assam) which is approximately 103 Kilometres from Shillong is the nearest railway station that connects the entire north eastern part of India to the rest of the country. In order to reach Shillong from Guwahati one would have to travel for approximately four hours by road. However, the recently launched Shillong Airport located in Umroi which is 32 kilometres from the state capital, also caters to trips to Kolkata, Imphal and Bagdogra.

#### **Tourists Attractions**

The unique landscape and scenic beauty that the state has to offer has captured the attention of travellers from other parts of the country and abroad. Some of these places are listed below:

- 1. Umiam Lake: On the way to Shillong a traveller is sure to be enthralled by the beauty of the Umiam Lake also known as Barapani by engaging in boating and photography. The place is also a paradise for picnic goers from the neighbouring states.
- 2. Shillong City: Travellers will be fascinated by many tourists' spots that are located in the vicinities and outskirts of the state capital itself. There are places like the Wards' lake or Nan Polok as it is locally referred to in the heart of the city, a man-made lake that caters to people who wish to enjoy a moment of leisure through boating, feeding the fishes or to just languish. One could also visit the Shillong Golf Course, the oldest and finest 18-hole natural golf course in the world surrounded by lush greenery. The Don Bosco Museum located in Mawlai exhibiting local and indigenous handicrafts, heirlooms and





depictions of the North East is a sight for sore eyes for anyone who wants to learn more about the region's local heritage and culture. The Phan Nonglait Park earlier referred to as Lady Hydari Park is also a travellers' delight for a moment of leisure and fun while interacting with some species of flora and fauna kept there. One could also experience the tranquillity and admire the architectural splendour of the Mary Help of Christians Cathedral located in Laitumkhrah. While visiting the outskirts of the city one could have a panoramic view of the city from the Shillong Peak or Lum Shillong as it is locally referred to and also visit the nearby Elephants' fall. The Laitlum plateau is another sight of wonder for any enthusiastic traveller.

- 3. Living Root Bridges: One among the world's renowned symbols of environmental friendly engineering ingenuity the Living Roots Bridges are located in Nongriat patiently woven by the indigenous local engineers to counter the harsh terrain in the absence of proper roads has become a place of interest for trekkers and adventure seekers.
- Nohkalikai Falls: Located in Sohra (Cherrapunjee) the fall is the tallest plunge waterfall in India with a height of 1115 feet. While the silky effect draws the attention of many tourists' the myth surrounding its name makes it more interesting.
- Shnongpdeng: Located adjacent to Dawki, the place with its crystal clear waters has drawn the attention of many tourists interested in swimming and kayaking the clear waters. Accommodations in make shift tents along the river banks is also an added attraction.
- 6. Mawlynnong: The village of Mawlynnong located adjacent to Pynursla, which has earned the reputation of being the cleanest village in Asia is admired by many travellers. The place also houses a living root bridge.
- 7. Krang Suri Falls: The waterfall in Amlarem, a Jiantia hills is popular for its crystal blue water and a paradise for thrill seekers who can enjoy their time through swimming and boating besides photography.
- 8. Mawlyngbna: Located 15 kilometres from Mawsynram village which holds the record for receiving the highest density of rainfall in the world, Mawlyngbna village is a scenic paradise that houses ancient fossils, cascading waterfalls and clear streams. Adventure seekers can partake in many activities like kayaking and canoeing.
- 9. Mawphlang Sacred Groves: The sacred groves in Mawphlang village which holds dear for the indigenous people is a habitat for some rare species of flora and fauna safeguarded by the fact that it is a restricted area and valuable to the belief system of the Khasis.
- 10. Siju Caves: Known not only for its waterfalls, the state also prides itself on its caves located in different locations. Located in the Napak lake and Simsang River game reserve (Garo Hills), the Siju cave most popularly known as Bat cave is a 4 kilometre long limestone cave famous for its stalactites and stalagmites.











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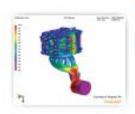
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NIT Meghalaya thank Star Cement Limited for sponsoring this event. Star Cement Limited is the largest cement manufacturer in north east India. It's plant is spread across 200 hectares of land in the idyllic town of Lumshnong, a strategic location at Meghalaya that ensures easy availability of high-grade limestone. The brand "Star Cement" has established itself as the most accredited brand of the region on grounds of both quality and fair pricing. Star Cement Limited is listed on National Stock Exchange (NSE) and Bombay Stock Exchange (BSE) and is one of the most profitable cement manufacturers in North East India because of its prudent locational advantage, timely raw material linkage proactive capacity expansion, and expert brand positioning

**Product:** Star Cement's product range includes Ordinary Portland Cement (OPC 43-Grade) and (OPC 53-Grade) and Portland Pozzolana Cement (PPC), Portland Slag Cement (PSC) and Anti Rust Cement (ARC) in line with evolving customer needs.

**Plant:** Star Cement's 1.0 MTPA integrated cement plant at Lumshnong (Meghalaya) is proximate to key raw material reserves of limestone, coal and shale. The company also added 0.67 MTPA cement unit in Meghalaya, 2.0 MTPA cement unit in Sonapur (Guwahati) and 2 grinding units in West Bengal with a total capacity of 0.67 MTPA (though trading agreement), aggregating an installed capacity of 4.3 MTPA.

**Pride:** Star Cement was recognized by the Meghalaya state government for its pioneering cement plant in the backward area of Lumshnong in 2005. The company is an ISO 9001:2008, ISO 14001 & OHSAS 18001 certified Company.

**Penetration:** Brand "Star Cement' is one of the largest in the Northeastern region. Its output is marketed through a network of over 6000 dealers and retailers across the North East, resulting in the largest market share in North East India. Star Cement also has a network of over 6000 dealers and retailers across West Bengal and Bihar. The Company's institutional customers comprise Larsen & Tourbo, National Hydro Power Corporation, Public Works Department, Indian Railways and Ministry of Defence.

The plant is located at village Lumshnong, situated on National Highway 44 and 135 Kms away from Shillong towards Silchar in Jaintia Hills.Meghalaya. Presently Star Cement is marketing super quality clinker to different grinding units located in India, Nepal & Bhutan. The company has received BIS License for the products being sold in the market. The company has developed a good image in the Market since launch of the product due to its superior quality. The company has also received ISO certificate.