

WEBINAR

on

Nano Materials

Date: 3rd June 2020

Resource Person:

P.K. Jain

Head, Center for Carbon Materials

International Advanced Research

Center for powder metallurgy and New Materials

No. of Students and/or Faculty Participated: 118

About session

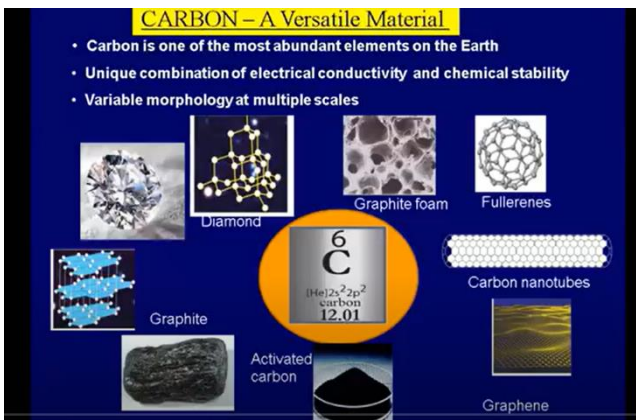
Nanomaterials can be defined as materials possessing, at minimum, one external dimension measuring 1-100nm. Nanomaterials can be categorized into four types such as 1) inorganic-based nanomaterials; (2) carbon-based nanomaterials; (3) organic-based nanomaterials; and (4) composite-based nanomaterials. Nano Research is a peer-reviewed, international, and interdisciplinary research journal that focuses on all aspects of nanoscience and nanotechnology. Nanoparticles exhibit size-dependent properties that are profoundly different from the corresponding bulk material. Properties such as electrical, magnetic, optical, mechanical, and chemical.

Objective

- To get a good knowledge of Nanostructured carbons and their application
- To understand the composition of all the materials and their uses and application in different industries.
- Encourage the development of engineered nanomaterials that are safer and more sustainable alternatives to materials
- To understand the formation of complex macro systems which are unique in their operations and possess new functionalities

CARBON – A Versatile Material

- Carbon is one of the most abundant elements on the Earth
- Unique combination of electrical conductivity and chemical stability
- Variable morphology at multiple scales



What is the Importance of Nano Research ?

Nanoparticles exhibit size dependent properties that are profoundly different from the corresponding bulk material.

Electrical	higher electrical conductivity in ceramics and magnetic nanocomposites; higher resistivity in metals
Magnetic	increase in magnetic coercivity down to a critical size in the nanoscale regime; below critical crystalline size, decrease in the coercivity leading to the superparamagnetic behavior
Mechanical	increase in hardness and strength of metals and alloys; enhanced ductility, toughness and formability of ceramics; super strength and superplasticity
Optical	blue shift of optical spectra of quantum-confined crystallites; increase in luminescent efficiency of semiconductors
Chemical	fundamental understanding of heterogeneous catalytic properties

Outcomes: The session broadens the knowledge of the faculties on the field of nanotechnologies, types of Nanomaterials, their importance, and their application in aerospace and other industries. The session gives an in-depth knowledge of a specialization area within the field of nanoscience and nanotechnology. proficiency in translating this knowledge into useful technological applications.



Centurion
UNIVERSITY



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Organized by :

**Centurion University of Technology and
Management**

DATE

3rd June 2020

centurion university of technology and management
Shaping Lives... Empowering Communities...

Faculty List:

1	Dr. Sambid Swain	Assistant Professor
2	Dr. Amrutha Gopan	Assistant Professor
3	Mr. Biswajit Mohanty	Assistant Professor
4	Mr. Avijit Biswas	Assistant Professor
5	Ms. Hauzoukim	Assistant Professor
6	Dr. Anita Patra	Professor
7	Dr. Subhendu Kumar Mishra	Associate Professor
8	Dr. Durga Prasad Padhi	Associate Professor
9	Dr. Parle Kalyan Chakravarty	Assistant Professor
10	Dr. S. Kameswar Rao	Assistant Professor
11	Mr. Kalee Prasanna Patnaik	Assistant Professor
12	Dr. Debi Prasad Satapathy	Assistant Professor
13	Mr. Amit Kumar	Assistant Professor
14	Dr. Prajna Pani	Professor
15	Dr. Susanta Kumar Patnaik	Assistant Professor
16	Dr. Girish Prasad Rath	Assistant Professor
17	Dr. Amir Prasad Behera	Assistant Professor
18	Nandakishore Ray	Asst. Professor
19	Smita Jana	Asst. Professor
20	Jagannath Padhy	Assistant Professor
21	Tofan Kumar Nahak	Assistant Professor

22	Dr. Santosh Kumar Nanda	Assistant Professor
23	Dr. Sivala Kumar	Professor
24	Dr. Gitanjali Behera	Assistant Professor
25	Dr. Shekhar Kumar Sahu	Assistant Professor
26	Dr. Santosh D.T.	Assistant Professor
27	Dr. Mitali Madhumita	Assistant Professor
28	Dr. Ruby Pandey	Assistant Professor
29	Dr. Sonam Sandeep Dash	Assistant Professor
30	Dr. Rajashree Jena	Assistant Professor
31	Dr. Prasanta Kumar Choudhury	Assistant Professor
32	Dr. Bhisma Narayan Rath	Assistant Professor
33	Dr. Satyabrata Nanda	Assistant Professor
34	Dr. Ashish Ranjan Dash	Associate Professor
35	Dr. Trilochan Penthia	Assistant Professor
36	Nanda Kishore Ray	Assistant Professor
37	Mr. Satyanarayan Padhy	Assistant Professor
38	Mr. Rajesh Kumar Misra	Assistant Professor
39	Ms. N. Jeevaratnam	Assistant Professor
40	Dr. Prafulla Kumar Panda	Associate Professor
41	Mr. Vignesh M.	Assistant Professor
42	Dr. Rajib Kumar Majhi	Assistant Professor
43	Dr. P. Srinivasa Rao	Professor
44	Mr. Mir Sadat Ali	Associate Professor
45	Dr. Sujit Mishra	Assistant Professor
46	Dr. Santosh Patro	Assistant Professor
47	Dr. Nagesh Kolagani	Professor
48	Dr. Dhawaleswar Rao CH	Associate Professor
49	Mr. Debendra Maharana	Assistant Professor
50	Mr. Md. Sameen Chishtis	Assistant Professor
51	Mr. Abinas Panda	Assistant Professor
52	Dr. Dillip Rout	Assistant Professor
53	Mr. Anshuman Pattanaik	Assistant Professor
54	Mr. Kirtidev Mohapatra	Asst. Professor
55	Jagannath Padhy	Assistant Professor
56	Tofan Kumar Nahak	Assistant Professor
57	N. Dibakar Choudhury	Assistant Professor
58	Dr. Debi Prasad Satapathy	Assistant Professor
59	Dr. Durga Prasad Padhi	Associate Professor
60	Dr. Kakani Grihalakshmi	Associate Professor
61	Dr. Parle Kalyan Chakravarty	Assistant Professor
62	Dr. S. Kameswar Rao	Assistant Professor
63	Dr. Tapas Bantha	Assistant Professor
64	Dr. Atanu Deb	Associate Professor
65	Dr. B. Narsimha Rao	Professor
66	Dr. Anant Tamang	Assistant Professor
67	Dr. Gouranga Ch. Mishra	Professor
68	Dr. Tanmoy Shankar	Associate Professor
69	Dr. Ashirbachan Mohapatra	Assistant Professor
70	Dr. V. Narsimha Reddy	Professor
71	Dr. K. Krishnam Raju	Associate Professor
72	Dr. K. S. Krishna Prasad	Professor cum Dean
73	Dr. Sambid Swain	Assistant Professor
74	Mr. Avijit Biswas	Assistant Professor
75	Dr. Amrutha Gupan	Assistant Professor
76	Dr. Sagarika Swain	Assistant Professor
77	Dr. Nisha Elizabeth Joshua	Assistant Professor
78	Dr. Srihari M.	Assistant Professor
79	Dr. Shashank Singh	Assistant Professor
80	Dr. Ngairangbam Sushila	Assistant Professor
81	Ms. Aruna Saini	Professor

82	Dr. Rabindra Nath Pradhan	Assistant Professor
83	Mr. I. Rama Koti	Assistant Professor
84	Dr. Ashok Misra	Professor
85	Dr. Banitamani Mallik	Professor
86	Dr. Balaji Padhy	Assistant Professor
87	Dr. Santosh Kumar Bhal	Assistant Professor
88	Dr. Vijaya Muditana	Associate Professor
89	Dr. Prajna Pani	Professor
90	Dr. Girish Prasad Rath	Assistant Professor
91	Dr. Susanta Kumar Patnaik	Assistant Professor
92	Dr. Amir Prasad Behera	Assistant Professor
93	Dr. Subhendu Kumar Mishra	Associate Professor
94	Mr. Sharmistha Sahu	Assistant Professor
95	Dr.Soma Maji	Assistant Professor
96	Dr. Mayank Singh	Assistant Professor
97	Dr. Satya Prakash Nanda	Professor cum Dean
98	Dr. M. Devender Reddy	Professor cum Dean Acad
99	Mr. Anil Kumar J.	Associate Dean
100	Mr. B. Chakrapani	Professor
101	Dr. Chitrasena Padhy	Assistant Professor
102	Dr. Ajay Kumar Prusty	Assistant Professor
103	Dr. Satarupa Modak	Assistant Professor
104	Dr. Akkammadevi Naik	Assistant Professor
105	Dr. Ashok Kumar	Assistant Professor
106	Dr. M. Chandra Surya Rao	Assistant Professor
107	Dr. Nilanjana Datta	Assistant Professor
108	Dr. Samapika Dalai	Assistant Professor
109	Dr. Anindita Roy	Assistant Professor
110	Dr. Barsha Tripathy	Assistant Professor
111	Dr. Smaranika Mohanta	Assistant Professor
112	Dr. Subhrajyoti Chatterjee	Assistant Professor
113	Dr. Archana Mishra	Assistant Professor
114	Dr. Praveen Boddna	Professor
115	Dr. Ria Mukhopadhyay	Assistant Professor
116	Dr. Gagan Kumar	Assistant Professor
117	Ms. Abhinandita Sahoo	Assistant Professor
118	Dr. Praveen Kumar	Assistant Professor

Prof. KVD Prakash
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