

DEPARTMENT OF PHYSICS KURUKSHETRA UNIVERSITY, KURUKSHETRA

(Established by the State Legislature Act-XII of 1956) ("A+" Grade, NAAC Accredited)

No. SM/PHY/23/7_11

To Whom It may Concern

The ongoing collaboration with Prof. Nanda Gopal Sahoo, started since 2018. Our collaboration is aimed at studying graphene and its composites for energy application. Our main effort exercised on the low budget synthesis of high-quality graphene-based materials from waste materials such as waste tyres, agriculture waste, and waste plastic for generation of high-performance supercapacitors for consumer electronics and weighted electrical vehicles. Such type of research can readily work not only ensure the progressive way to deal with environmental hazards but will also provide certain value in the energy industry of India.

So far, our collaboration is very successful leading to articles published in *Materials and Manufacturing Processes* (DOI: 10.1080/10426914.2020.1832680, 2020), *International Journal of Applied Ceramic Technology* (DOI: 10.1111/ijac.13529, 2020), *High Performance Polymers* (DOI: 10.1177/0954008320905659, 2020), RSC Advances (DOI: 10.1039/D0RA09393A) and many book chapters: in CRC press, Nova Express, etc. and some patents under process.

We are also, jointly working on project entitled "Purification and Valorization through Indigenous Tailoring of Raw Polymeric waste into Advanced Multidimensional Carbon Nano Materials (PAVITRAM) for Large Scale Energy Storage applications including Supercapacitors and Batteries" of cost Rs. 1,90,59,320.00 only/- (One Crore Ninety Lakh Fifty Nine Thousand Three Hundred Twenty Only) for a period of three years which has been sanctioned from the Ministry of Environment, Forest and Climate change: NMHS (NATIONAL MISSION ON HIMALAYAN STUDIES (NMHS) G.B. Pant National Institute of Himalayan Environment (NIHE) Kosi-Katarmal, Almora.

Our collaboration currently also engaged in synthesis and fabrication of polymer gel electrolyte and electrodes for pseducapacitors, batteries and hybrid supercapcitors in a field of energy storage applications. Many research students and research associates are benefited with this collaboration and showing their great potential as a research scientist in area of Carbon nanomaterials and related Energy storage devices.

We are doing rigorous R & D for the development of technology that will definitely produce highly efficient Supercapacitors with very sustainable cost effectiveness as per the marketing scenario. The main aim of the collaboration is to promote the greener technologies and Upcycling of waste materials for "Waste to Wealth".

Hope our fruitful collaboration continues for long for producing goods by doing good.

With all my best wishes.

(Dr. Suman Mahendia)

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Department of Pharmacology

To Whom It May Concern

July 25th, 2023

Since 2017, I have been working with Prof Nandagopal Sahoo, Department of Chemistry, Prof. Rajendra Singh Nanoscience and Nanotechnology Centre, D.S.B. Campus, Kumaun University, Nainital, Uttarakhand, India. We have published a number of original research articles in SCI-indexed journals based on our collaborative works. In particular, we studied the loading, release, and delivery of anticancer drugs using functionalized graphene oxide as a nanocarrier onto the cancer cells.

Thanking You.

Sincerely,



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To Whom It May Concern

Currently I am working as Professor in the Chemistry Department at University of Petroleum & Energy Studies (UPES) Dehradun, India. Prior to joining UPES as Assistant Professor in June 2016, I worked as a Postdoctoral Research Fellow from 2012-2016 at Martin Luther University Halle-Wittenberg, Germany (With Prof. Wolfgang H. Binder), and at Nanyang Technological University, Singapore from 2011 to 2012. I have pursued my Ph.D. from Konkuk University Seoul, South Korea.

Since my joining UPES, I have been continuing my collaboration with Dr. Nanda Gopal Sahoo, as he possesses exceptional technical knowledge as well as impressive analytical talents. So far, the collaboration is highly successful and leading to many research articles as well as joint project.

I feel extremely thankful to Dr. Sahoo for his great support all the time.

Sravendra Rana; PhD

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अटल बिहारी वाजपेयी-

भारतीय सूचना प्रौद्योगिकी एवं प्रबंधन संस्थान, ग्वालियर (भारत सरकार का स्वशासी संस्थान)

Atal Bihari Vajpayee-

Indian Institute of Information Technology & Management, Gwalior

(An Autonomous Institute of Government of India)

July 24, 2023

TO WHOMSOEVER IT MAY CONCERN

It's a matter of pride, writing about one of my scientific and academic collaboration with Prof. Nandgopal Sahoo and his research group at Department of Chemistry, Kumaun University, Nainital (UK). Since 2016, our group at Indian Institute of Information Technology and Management has association with the research group of Prof. Nandgopal Sahoo. We are working on various scientific problems related to energy and environment sector, especially on waste to wealth. And happily mentioning that we could generate remarakble findings, appreciated in form of SCI publications, patents and research project grants.

This journey of collaboration with Prof. Sahoo is now about seven years old and is getting even stronger in last couple of years. I appreciate the role of Prof. Sahoo as leader of the group and his deadicated staff, faculty and students of his department, contributing towards strengthening this relationship, fruther. As a Dean of Alumni and External Relations at IIITM Gwalior, I would love to transform this relationship into an MoU between IIITM Gwalior and Kumaun University, Nainital, as two knowledge partners.

I wish Prof. Sahoo and his group a great success.

Anurag Srivastava

Chief Mentor, Advanced Materials Research Group (AMRG), Professor at Department of Engineering Sciences Dean of Alumni and External Relations ABV-IIITM, Gwalior M.P., India

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