INTRODUCTION TO MATERIALS SCIENCE

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ABSTRACT

Materials science, the study of the properties of solid materials and how those properties are determined by a material's composition and structure. It grew out of an amalgam of solid-state physics, metallurgy, and chemistry, since the rich variety of materials properties cannot be understood within the context of any single classical discipline. With a basic understanding of the origins of properties, materials can be selected or designed for an enormous variety of applications, ranging from structural steels to computer microchips. Materials science is therefore important to engineering activities such as electronics, aerospace, telecommunications, information processing, nuclear power, and energy conversion.

RESUME



PROF RATNESH DAS

Ratnesh Das is a Professor in the Department of Chemistry, Dr.Harisingh Gour Central University, Sagar, India. He commands a rich experience in teaching, and research of about 16 years during which he has supervised many sponsored research projects. His active research areas include Heterocyclic synthesis, medicinal chemistry , electro-organic chemistry, synthesis of nano-catalysts and green chemistry. He has authored about 60 research papers in peer-reviewed national and international journals and refereed conferences organized by professional societies around the world. He is an active member of several professional bodies and societies, both in India and abroad. He is a vibrant speaker and delivered many lectures in conferences, workshops, and seminars organized both in India and abroad.

Education

Ph.D.: 1997-2001 in Chemistry, Dr.Harisingh Gour Central University, Sagar, India.

M.Sc.: (First Division 64.7 %) 1995-1996 in Organic chemistry, Dr.Harisingh Gour Central University, Sagar, India.

B.Sc. ; (First Division 68 %) 1992-1994 in Chemistry, Zoology and Botany, Dr.Harisingh Gour Central University, Sagar, India.

12 th : (First Division70%) 1991 in Chemistry, Physics and Biology, .St Josephs Convent H.S.School Sagar.

Academic & other positions

Professor (07/2019- till date) in the Dept. of Chemistry, Dr.Harisingh Gour Central University, Sagar, India.

Associate Professor (07/2016 to 07/2019) in the Dept. of Chemistry, Dr.Harisingh Gour Central University, Sagar, India.

Assistant Professor (07/2004 to 07/2016) in the Dept. of Chemistry, Dr.Harisingh Gour Central University, Sagar, India.

Sponsored research

Sponsored research projects completed for:

1. University Grants Commission.
2. SERB-DST.
3. MPCST