भारतीय प्रौद्योगिकी संस्थान हैदराबाद
Indian Institute of Technology Hyderabad

GLOBAL INITIATIVE OF ACADEMIC NETWORKS

Ministry of Education
Government of India
सत्यमेव जयते

one week GIAN course on

Artificial Neural Networks Modeling for Processing of Metals and Materials

IIT HYDERABAD

Course duration: 13-17 June, 2022

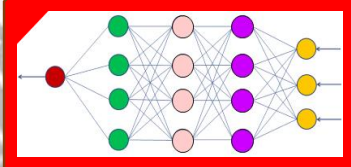
Course Contents

1. Introduction to Artificial Neural Networks (ANN)
2. Learning in neural networks, implementation procedure, prediction and comparison with actual results and extraction of knowledge from the database.
3. Modeling of the effect of alloy composition on the β-transus temperature in titanium alloys.
4. Hot deformation behaviour of Ti-6Al-4V alpha-beta alloy with different microstructure.
5. Modeling composition-heat treatment-mechanical properties relationship in medium carbon steels.
6. Estimation of compositional dependence of Martensite start temperature in steels
7. Machinability analysis of Inconel superalloys during electro-discharge machining by artificial neural networks models
8. Prediction of the relationships between electrospinning process parameters and nanofiber diameter
9. Modeling physical and mechanical properties metal matrix composites
10. Expected future of Artificial Neural Networks, resources available for modeling and open data sources

The Expert

Prof. N. Subba Reddy is currently a Professor at the School of Materials Science and Engineering, Gyeongsang National University (GNU), Republic of Korea. He received his PhD and Masters degrees in Metallurgical and Materials Engineering from IIT Kharagpur. He completed A.M.I.E in Mechanical Engineering after the Polytechnic Diploma in Automobile Engineering from Govt. Polytechnic, Anantapur.

Prior to present position, he worked as Research Scientist at Pohang University of Science and Technology, Korea. His research interests are the Application of Computational Intelligence to various phenomena in materials science engineering. Prof. Reddy has several publications and delivered talks at various conferences and symposiums. He has visited several countries and have global exposure.



Credits/Exam./Certificate
It is equivalent to 1-Credit course (as per IITH norms). Students who passes the exam. will be given 1 Credit); & certificate to others

Registration fee

Participants	Fee
Students	Rs. 1000
Faculty members	Rs. 5000 + 18% GST (Rs. 900)
Scientists/ Researchers from Govt. R&D/ Public Sector Industry	Rs. 5000 + 18% GST (Rs. 900)
For all others	Rs. 10000 + 18% GST (Rs. 1800)

Mode of payment:
DD or Cheque in favour of 'Registrar, IIT Hyderabad' or
Online payment: 'Registrar IIT Hyderabad', A/C No: 30412797764, IFSC code: SBIN0014182, Branch: SBI IIT Hyderabad Kandi

Application procedure: Apply online at IIT Hyderabad website https://iith.ac.in/ on or before 8th June, 2022

Venue: IIT Hyderabad campus (off-line)

Accommodation: not available in campus, Participants need to make own arrangement.

Who can attend

Students (at all levels: BTech /MSc/ MTech/ Ph.D.), researchers, faculty members from academic institutions, industry personals and personals from R&D laboratories, from chemistry, physics, chemical, materials science, metallurgical engineering, mechanical, civil engineering, computer science, and interdisciplinary areas.

Course Coordinator:
Prof. Bharat B. Panigrahi

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