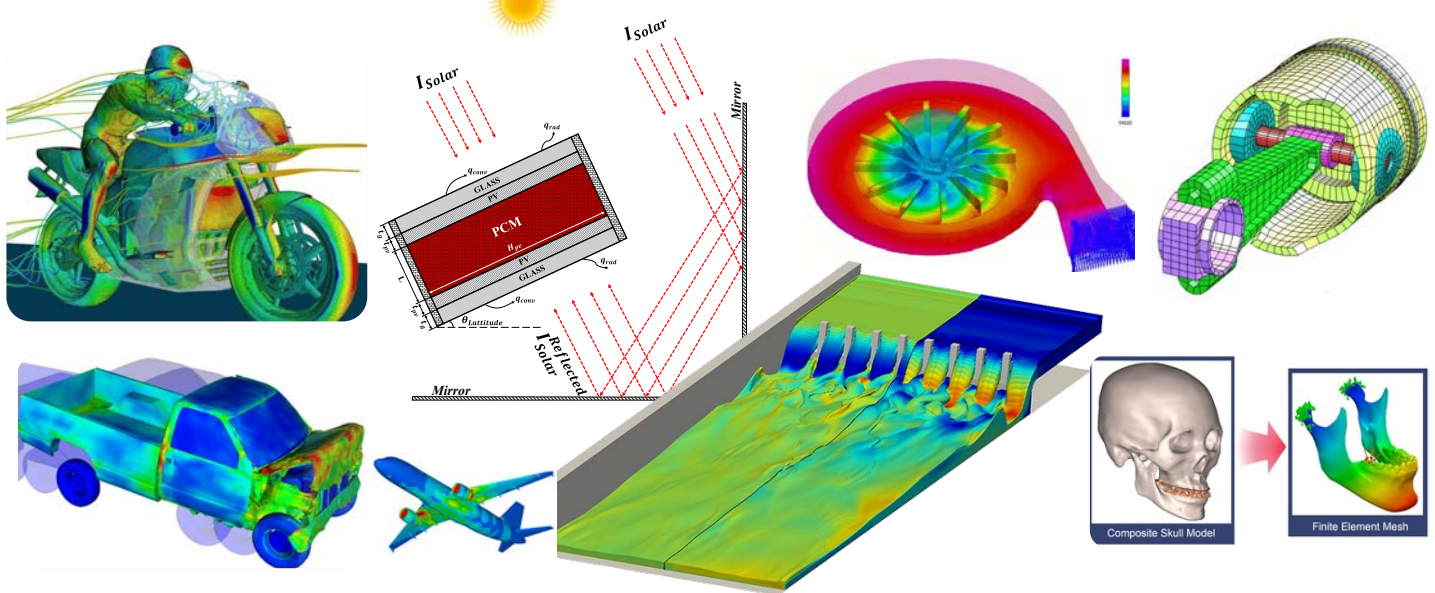# International Summer School at IIT (BHU) on
Industrial CAD, CFD and Scientific Writing
June 1-14, 2022
(2-week online job-oriented training program)
https://conferences.iitbhu.ac.in/CFDFEM2022/

Objectives:

With advent of digital technology, more and more industries are adopting modern Computer Aided Engineering (CAE) processes for product design. They need engineers with skills who can create complex Computer Aided Design (CAD) and develop Computational Fluid Dynamics (CFD) models and analyze the product that are light weight and functionally efficient. However, the outdated academic curriculum doesn't provide sufficient training on today's increasingly complex and multidisciplinary product design processes. With the advent of advanced technologies such as Artificial Intelligence, Machine learning etc., these CAD and CFD skills would come handy in generating accurate data where there is no history of experimental data. Further, in the age of high demand of professionals from industries with multiple skills, this course will boost the confidence and skills to meet the real world product design challenges. Additionally, training will be provided on technical writing, English language; high quality figure generation, curve fitting, how to use numerical results for quality publications etc. No such courses/training programs are offered that provides skill based training on both the world of intensive CAD, CFD and Drafting. This training program is much more than education where participants will gain practical global competence to meet today's intense industry demand. Ansys Workbench (SpaceClaim, Meshing and Fluent) will be used along with the theoretical background during the entire project-based training program. Apart from this, special topics such as developing 3D CAD from 2D camera images and then developing CFD models will also be covered. Industries use this technique regularly for reverse engineering and study competitors products.

Important Features:

- Entire course through online mode
- First of its kind rigorous job oriented training program on CAD, CFD & Scientific writing.
- Covers almost entire engineering concepts in just 2-week
- Access to training materials, videos etc. to all the participants
- Simple to advanced modeling techniques of CFD.
- Project execution and technical paper writing.

Scope of Summer School :

- CAD modeling, mesh generation, handling complex geometry
- Internal and external CFD - Laminar and turbulent
- Multiphase flows, VOF
- Heat transfer: PCM melting and solidification, multi-zone conjugate problems etc.
- Reverse engineering, 2D images to 3D CAD conversion.
- Sessions on how to write for publication using CFD results.

Target participants:

- BE/B.Tech, M.E/ M.Tech or Ph.D. research students who want to advance their careers in numerical modeling.
- Participants from Mechanical, Civil, Chemical, Electronics, Electrical etc. can join this online course.

Registration Details: visit the link below
- Event web page: https://conferences.iitbhu.ac.in/CFDFEM2022/

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