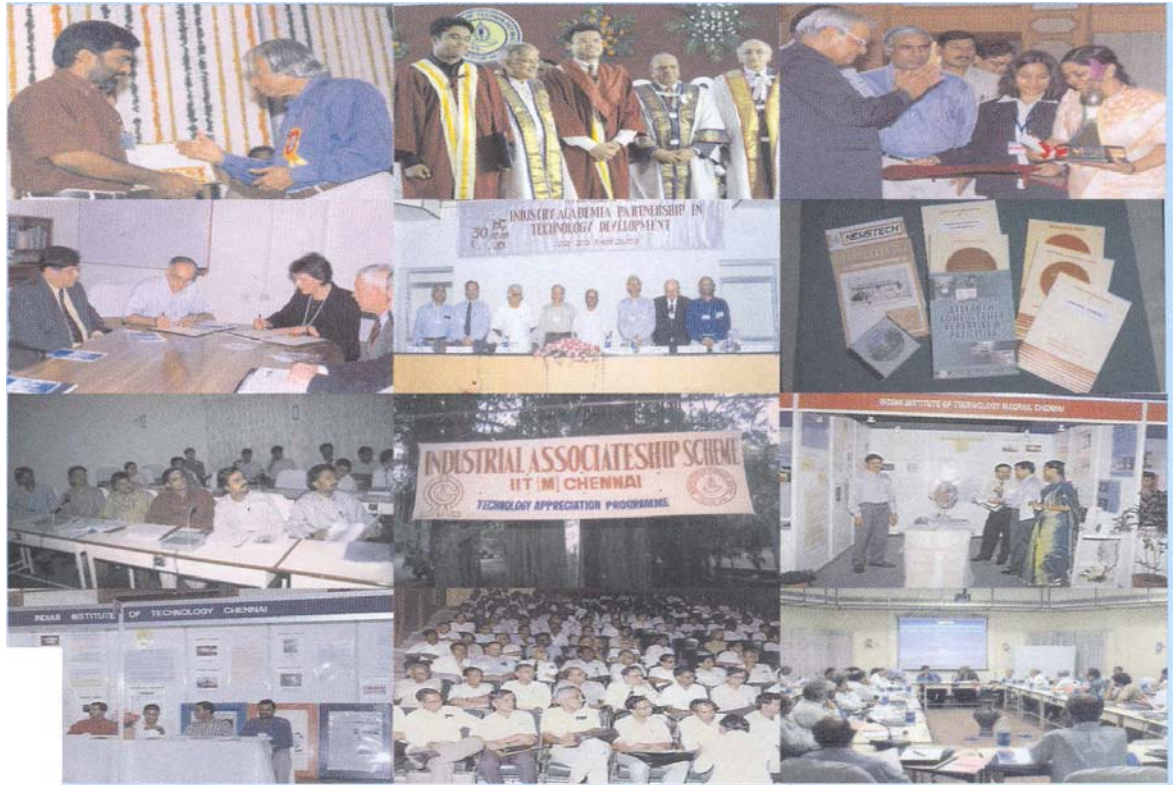# INDUSTRIAL ASSOCIATESHIP SCHEME

Centre for Industrial Consultancy and Sponsored Research
INDIAN INSTITUTE OF TECHNOLOGY MADRAS
CHENNAI - 600 036

DECEMBER 2010

PREAMBLE

IIT Madras has been in the forefront in promoting Industry - Institute interaction through several innovative schemes.
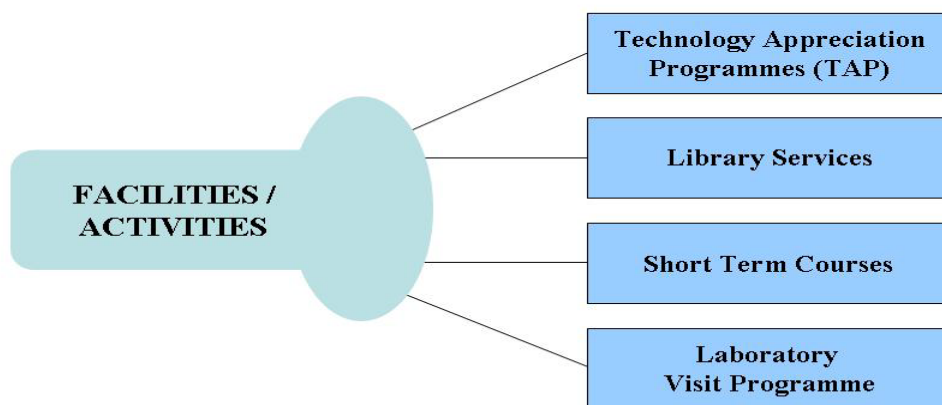
The faculty of the Institute undertake a number of Consultancy & Research Projects in the frontier areas of technology. Through these activities and research at Masters and Doctorate levels, know-how and Intellectual Property are developed. The Institute is keen to transfer / exchange these with the industry.

To further strengthen the linkages with the industry, the Industrial Associateship Scheme (IAS) was started by IIT Madras in 1987. At present; as given below about 227 industries and organisations from all over the country are members of this scheme.

Small Scale Industries	:	65 members
Medium Scale Industries	:	135 members
Large Scale Industries	:	27 members

FACILITIES / ACTIVITIES

The members of the scheme can avail a number of facilities and participate in the activities promoted by IIT Madras under this scheme.

Technology Appreciation Programme (TAP)

TAP aims to review the state-of-the-art in frontier areas of technology with the members of IAS by organizing one-day interactive programmes comprising of lectures by experts, demonstrations and panel discussion. The following programmes have been so far organised under this scheme:

(i) Energy

Energy Storage (1990)
Strategies for Energy Saving in Industry (1993)
Refrigeration Industry (1994)
Advances in Electrical Power Systems (1994)
Photovoltaics for Terrestrial and Space Applications (1996)
Plate Heat Exchangers: The New Wave (1996)
Refrigeration under Cryogenic Conditions (1997)
Recent Trends in Power Engineering (2004)
Fuel Cells (2005)
Engine Technology (2006)
Energy Aspects of Build Environment (2006)
Energy, Environmental and Biological Applications of Nanomaterials (2009)

(ii) Environment

Industrial Noise Control (1991)
Corrosion Prevention in Industry (1993)
Environmental Pollution Control (1997)
Analytical Tools for Engine Emission Diagnostics (1998)
ISO 14000 Environment Management System (1998)
Evaluation of Biotechnological Approaches to Waste Management (2000)
Pollution Control Equipment (2001)
Acoustics and Noise Control for Industry (2005)
Urban Air Quality Management:: Problems and Management Practices (2009)

(iii) Materials

Modern Materials & their Industrial Applications (1987)
Superconductivity Applications (1987)
High Performance Plastics (1990)
Failure Analysis (1990)
High Performance Ceramics (1991)
Plasma Manufacturing and Processing (1992)
Advanced Materials (1994)
Computer Aided Inspection of Polymeric Materials (1998)
Industrial Applications of Electron Microscopy (1999)
Rheology in Performance Evaluation, Product Development and
Quality Control (2000)
Catalysis in Chemical Industries (2000)
Powder Metallurgy (2000)
Industrial applications of Thin Film (2001)
Recent Trends on High Performance FRP Composites (2004)
Welding Technology (2006)
Nanomaterials & Nanotechnology (2007)

(iv)   Information Technology & Communication

Fibre Optics and Applications (1988)
Computer Networking-State of the Art (1989)
Office Automation for the Nineties (1990)
Corporate E-Mail Work (1992)
Computer Application in Small Scale Industry (1992)
Recent Trends in Process Control (1994)
Client Server Architecture and Applications (1994)
CD ROMs Its Use in New Information Technology (1995)
Multimedia Technology and Applications (1996)
Industrial Information Services (2002)
Delivery of Manufacturing Process Through ASP Model (2002)

(v)   Manufacturing

Artificial Intelligence based Mechanical Design (1990)
Advances in Precision Engineering (1992)
Robotics: Its Appreciation and Adoption in India (1996)
Mechanics of Engineering Systems: Recent Trends and Techniques for the
Industry (1997)
Mechatronics (1998)
Materials Handling for the Next Millennium (1999)
Recent Developments in Gear Technology (2000)
Orientation towards Mathematical Treatment of Metal Forming (2003)
Nanotechnology for Industries (2004)
Industrial Process Optimization-Application on Taguchi Quality Loss Function Analysis (2006)
Metrology and Quality Control (2007)
Robotics and Automation (2008)
Recent Trends in Research on Automotive Systems (2009)

(vi)   Engineering Software

Finite Element Techniques (1987)
Expert Systems in Indian Industries (1989)
Artificial Intelligence in Diagnosis (1989)
Engineering Application Software (1993)
CFD for Process Industry Applications (2001)
Awareness to SoC Design and Verification (2003)
Industrial Applications of CFD (2004)

(vii)   Management

Operations Research & its Applications in Industries (1987)
Reliability Engineering (1991)
Preparing for World-Class Manufacturing (1992)
Required Rate of Return: Conceptual and Computational Advances (1995)
Synchronous Manufacturing A New Approach to Job Scheduling (1996)
Quality Management (1996)
Supply Chain Management (2002)

Strategy Formulation in Competitive Scenario (2003)
Cyber Laws (2004)
Knowledge Management & Application Software for Science & Engineering (2005)
Ergonomics of Computer Centric Work Places (2005)
Ergonomics (2007)

(Viii) Electronics, Instrumentation & Control

Microelectronics (1987)
Microprocessor Applications (1988)
Lasers in Industry (1988) Power Electronics (1991)
Instrumentation & Digital Control (1992)
Digital Signal Processing (1992)
Digital Process Control (1992)
Recent Trends in Fuzzy Logic Control (1997)
Smart Sensors & Valve Positioners (1999)
Industrial Applications of Analytical Instruments (1999)
Technology for Induction Machine Drives (2001)
Digital Signal Processing: Theory and Applications (2002)
Overview of Wireless Technologies - GSM, Cdma 2000,Cor DECT (2003)
Industrial Applications of Optical Techniques for Designs, Diagnostics and
Measurement (2004)
Microwave Applications (2006)

(ix)   Others

Fluid Power Status on Technology (1988),
Surface Treatment for Industrial Applications (1988)
Advances in Welding Technology (1989)
Mathematics in Industry (1989)
Recent Developments in Materials Handling (1989)
Cryogenic Applications in Industry (1990)
Pumps Application Engineering (1993)
Advances in Biomedical Engineering Applications (1995)
Future Trends in Chemical Engineering Applications (1995)
Condition Monitoring for Quality Assurance (1995)
GIS Applications in Industries (1999)
Industrial Mathematics & Scientific Computing (1999)
Simulations on Computing for Industrial Application (2000)
Industrial Statistics (2001)
Nondestructive Evaluation (2002)
Modelling and Simulation in Industrial Problems:
Ocean Engineering & Chemical Processes (2002)
Bio Process Technologies for New Generation Bio Pharmaceuticals (2005)
Reverse Engineering (2005)
Industrial Catalysts (2006)
Sophisticated Analytical Instrument Facility (2007)

- *LIBRARY*

The Library facilities of the Institute are extended to the IAS industry members, under this scheme, with the following privileges.

(i) Borrowing of Books

➤ *Library Cards to borrow books*
. One for small scale industry
. Two for medium scale industry
. Three for large scale industry

(ii) Photocopying Services
- Reference books and journals (bound volumes)

- *INFORMATION SERVICE*

- IIT - MADRAS NEWS, a quarterly publication containing information
  regarding various activities (academic, research, consultancy) of the Institute, sent
  to the members.

- *SHORT TERM COURSES / SPECIAL LECTURES*

Members are eligible for priority in registration and 10% concession on registration fee for attending short-term courses or continuing education programmes conducted by the Institute.

MEMBERSHIP FEE

Industries / Organisations / Government agencies are invited to become associates of the Institute, at the following rates* :

Small scale industry	**Rs. 3000/-**
Medium scale industry	**Rs. 5000/-**
Large scale industry	**Rs. 10000/-**
R&D Institutions, Consultancy	
Organisations and other **Service Sectors**	**Rs. 5000/-**

* Fees Per calendar year (January - December)