ASEI

American Society

of

Engineers from India



NATIONAL CONVENTION



Technology, & Indian Economic Reforms

Sunday, September 6, 1992 Ramada Renaissance Hotel Dulles International Airport, Virginia

With Best

Compliments

from

SIGMA ASSOCIATES, INC.

ARCHITECTS * ENGINEERS * PLANNERS

ELHAM SHAYOTA, PE

PRESIDENT

15215 WEST 8 MILE
DETROIT, MICHIGAN 48235

(313) 864-0500

AMERICAN SOCIETY OF ENGINEERS FROM INDIA

VISION

ASEI TO BE:

- A nationwide network of engineers of Indian origin
- A forum to assist members in advancing their careers
- A facilitator of Technology Transfer between U.S.A. and India
- A national professional organization with the goal of "service to its members"

ASEI ACTIVITIES

CAREER ENHANCEMENTS

- Provide Career Guidance and Counseling
- Facilitate Networking
- Assist in Skill Development through Continuing Education Courses and Technical Seminars
- Encourage PE registrations

STUDENT AFFAIRS

- Providing guidance to Students
- Establish Merit Scholarships
- Assist in Practical Training and job placement

ORGANIZATIONAL MATTERS

- Establish a National Office
- Establish an Editorial Board and Publish Quality Newsletter
- Increase Membership
- · Publish Directory of Members
- Increase awarness of ASEI
- · Facilitate local chapter meetings

TECHNOLOGY TRANSFER

- Conduct Workshops on How To Transfer Technology to India
- · Assist in Development of Rural India
- Provide Communication Channels for Retired Engineers
- Disseminate Opportunities in India for NRIs.

LIAISON WITH INDIA

 Establish working relationship with government and private organizations in India

CONVENTIONS & AFFILIATIONS

- · Conduct Conventions throughout U.S.A.
- Cooperate with Other Professional Societies with Similar Goals.

LOCAL CHAPTER ACTIVITIES

- Conduct bimonthly meetings to promote discussion/participation on current events
- Communicate with ASEI National Office and other Local Chapters

ABOUT THE SPEAKERS

- Mrs. Meera Shankar is the Minister of Commerce at the Indian Embassy in Washington, DC. Since joining the Indian Foreign Service in 1973, she has held a number of foreign service assignments including Vice Consul at Consulate General of India in Hamburg, Germany.
- Mr. Sharad Marathe is President of ICAT. ICAT is an NRI company set up to promote investments and technology transfer between India and USA. He is also Chairman of the Software Technology Park Private Ltd and Founder of the Universal Technical Systems, Inc.
- **Dr. Rashmi Mayur** is the Director of the Urban Development Institute as well as Coordinator of the World Information Transfer in Bombay, India. He is also Chairman of the Think Tank on the Future, a study group of the Indian Government. Having travelled to 68 nations, he has developed a first–hand perspective of global environmental awareness.
- **Dr. Arun Netravali** is the Director of the Computing Systems Research and Technology Conversion Laboratories at AT&T Bell Lab with responsibility for research in VLSI design and architecture, communication networks, programming languages and digital television.
- **Mr. Jeff Rosolio** is the Vice President of for Administration of I–NET, a rapidly growing information system company specializing in telecommunication, electronic imaging, software engineering and facility management.
- Mr. N. S. Vishwanath is the President of System development International (SDI), a computer service firm in Rockville, MD. In

- the past, he has worked for a major executive search firm. He holds a MPA degree from Harvard University and a MS in Engineering Management from University of Missouri.
- Mr. Sudhir K. Jain is the current President of the American Society of Engineers from India. He is also the President of IMSI, a well established firm specializing in Project Planning and Managing in Ann Arbor, Michigan.
- **Dr. D. S. Sastry** is the principal attorney with Law Offices in Silver Spring, MD specializing in immigration and naturalization as well as corporate laws. He is associated with DC and Md Bar Associations. He had been a Consul to the Embassy of India and National Capital Park and Planning Commission. He represented permanent mission of India at the UNO.
- **Dr. C. Kumar Patel** is the Executive Director of research in the Materials Science Engineering and Academic Affairs Division of AT&T Bell Lab. His discovery of the laser action of carbon dioxide and invention of efficient vibrational energy transfer between molecules led to the development of carbon dioxide lasers (the work horses in several applications).
- **Dr. Ravi Prakash** is the Counsellor (Science) at the Embassy of India in Washington, DC. Prior to joining this position, he was the Head and Professor of Biomedical Engineering at the Banaras Hindu University since 1985. He holds a Masters degree from the University of Salford and Ph.D. from Cranfield Institute of Technology in U.K.

AMERICAN SOCIETY OF ENGINEERS FROM INDIA

NINTH NATIONAL CONVENTION

Sunday September 6, 1992, Ramada Renaissance Hotel

2:00 pm

Registration

2:30 pm

Plenary Session:

Economic Reforms in India

Mrs. Meera Shankar

3:30 pm

Two Concurrent Sessions

Session A:

Software Business between India & USA

Mr. Sharad Marathe

Global Environment

Dr. Rashmi Mayur

Advances in HDTV

Dr. Arun Netravali

Session B:

Carrer Opportunities

Mr. Jeff Rosolio

Resumes Review

Mr. N. S. Vishwanath

Immigration Matters

Dr. D. S. Sastry

6:00 pm

Social Hour

Welcome

Dr. Vinod K. Goel

ASEI-NCC President's Report

Dr. Chandra Pathak

ASEI-HQ President's Report

Mr. Sudhir K. Jain

Keynote Address

Dr. C. Kumar Patel

Guest of Honour Address

Dr. Ravi Prakash

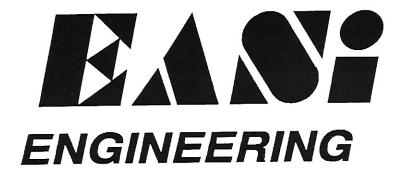
Awards

8:30 pm

Dinner

9:30 pm

Variety Entertainment



"PRODUCT ENGINEERING
THROUGH
ADVANCED TECHNOLOGY"

691 North Squirrel Road Auburn Hills, MI 48326 (313)373-4200

PRAKASH "KRISH" KRISHNASWAMY President

VIRESH DOSHI Vice president



COMMONWEALTH of VIRGINIA

Lawrence Douglas Wilder Governor Office of the Governor Richmond 23219

A MESSAGE FROM THE GOVERNOR

I am pleased to send my personal and heartfelt greetings to you, the members of the American Society of Engineers from India, as you gather for your annual convention.

As we prepare to enter the 21st century, one of our greatest challenges is maintaining our competitive role in science and technology. Engineers in many fields play a vital role in meeting this goal. Conventions such as this one allow the exchange of new ideas and provide an increased understanding of sometimes complex topics for all participants. I am confident that you will benefit greatly in your profession from the opportunity to gather together today.

I would also like to take this opportunity to welcome you to Virginia. From the banks of the Potomac to the Blue Ridge Mountains, Virginia offers some of this nation's premier cultural, historical, scenic, and recreational attractions. I hope that our history and hospitality will meet your every expectation.

To each of you, I extend my best wishes for an enjoyable and productive event.

1992

BOARD OF DIRECTORS

BOARD OF BIRLESTONE				
Vora, Shailesh Nomula, Ram Mehta, Mukul Goel, Vinod Gulati, Suresh Jain, Sudhir Khasnabis, Snehamay Krishnaswamy, Prakash Memula, Linga Goud Tuteja, Arjun Vattikuti, Raj Vijan, Arun Kulkarni, Bhushan Kymal, Chad Gupta, Naresh	(CHAIRPERSON) (V. CHAIR) (SECRETARY)		(205) 8 (216) 7 (703) 3 (607) 7 (313) 7 (313) 8 (313) 8 (313) 8 (313) 8 (313) 8 (313) 8	83-3910 159-0742 179-5057 118-0774 133-4758 169-2383 169-2383 169-3542 177-4200 189-0654 169-5282 164-2939 1689-9897 171-2956 184-3099 1830-9017
EXECUTIVE COMMITTEE				
Jain, Sudhir Kymal, Chad Bhushan Kulkarni	PRESIDENT V.PRESIDENT TREASURER		(313)	769-2383 484-3099 971-2956
CHAIRPERSON'S COMMITTE Kapadia, Noor Patel, Ramesh Reddy, Asha	ES CONSTITUTION AUDIT PLANNING		(313)	435-0914 559-0443 335-4429
PRESIDENT'S COMMITTEES			A481720 No. 948099	
Gulati, Suresh Jain, Sudhir Vora, Lakshmi Kalidindi, Kumar Agrawal, Jagdish Garimella, Rao Kymal, Chad Singhal, Ashok Open Open Vinod K. Goel	AWARDS NEWSLETTER M'SHIP DEVP'T M'SHIP SVCS LIASION STUDENT AFRS TECH TRF BUSINESS/CSTG FUND RAISING CAREER ENHANG ANNUAL CONVEN		(313) (313) (313) (313) (614) (313) (313) (313)	924-1688 769-2383 337-1550 971-1228 557-3060 593-6749 484-3099 429-1350 644-2939
Rao, Veni	INDIA LIAISON		Madi	as 465296
LOCAL CHAPTERS PRESIDE	NTS			
WASHINGTON HUNTSVILLE TOLEDO NW INDIANA ATHENS, OH	Pathak, Chandra Kalia, Prince Varanasi, Sasidha Balajee, Shank Rayi, Prakash	ar	(205) (419) (219)	916-5660 464-9274 841-9303 924-1688 593-3917
Address for correspondence President: (S.K. Jain) 678 Wembley Court Ann Arbor, MI 48103	:	TEL FAX		769 2383 769-4983

ASEI 1992-1993 STATUS REPORT

Fellow Members:

This year has already been a period of major transition, positive change, and significant accomplishments.

Our goal this year has been to "make it happen" and put into practice all the good ideas we have accumulated from past years. We targeted 1) Improving the frequency and content of the ASEI newsletter 2) Holding regular meetings at the chapter level and improving networking and 3) Holding the annual convention outside of Michigan for the first time in ASEI history and 4) Documenting and organizing Chapter and Committee functions and responsibilities.

Some of the major accomplishments by topic are as follows:

Vision/Idea document:

A long term vision and idea document was prepared and distributed to all officers, chapters and active volunteers. The chapters have used the document to become more focused in planning current year activities. You are encouraged to obtain your own copy of the document.

Monthly Newsletter:

The ASEI newsletter was changed to a monthly format to stimulate more participation and to communicate activities on a more timely basis. The new format has been well received. More participation is needed by all members. A new newsletter name "LINK" and a new ASEI logo were adopted.

New Directory:

A 1992 directory was mailed to members in March. An updated directory is planned to be published in September.

Membership:

The membership form was updated and a new corporate membership category was initiated. A member benefits benefits guide was prepared.

Committees:

National Committees were established in key areas of interest: Career Enhancement, Student Affairs, Business & Consulting, and Technology Transfer, Membership, Awards, and Fund-raising. A lot more work needs to be done by all Committee Chairpersons. We need volunteers to help with committee work.



PRESERVING TOMORROW'S WORLD TODAY

- BIOPROCESS TECHNOLOGIES
- REMEDIATION TECHNOLOGIES
- ENVIRONMENTAL ANALYSIS
- COLIFAST^{IM} WATER TEST KIT
- AGRICULTURAL PRODUCTS
- PESTICIDE TESTING



Organic Based Fertilizer
With Humic Acids For
LAWN and GARDEN

ARCTECH IS NOW SEEKING PROFESSIONAL ENVIRONMENTAL ENGINEERS AND PROCESS ENGINEERS. SEND RESUME TO:

ARCTECH, INC. 14100 Park Meadow Dr., Chantilly, VA 22021 TEL: (703) 222–0280

GREETINGS FROM

Sheladia Associates, Inc.

Engineers, Architects, Planners

Consulting Services In:
Transportation Water Resources
Energy Environmental
Building Field Services

15825 Shady Grove Road Rockville, Maryland 20850 Phone: (301) 258-7474

Fax: (301) 948-7174

Sections:

The Athens, Huntsville, Michigan, Toledo, and Washington chapters remain healthy and progressive. The newsletter has reported chapter activities. Interest is forming in several new areas to form new chapters.

A list of future chapter locations has been prepared. The criteria is a metropolitan city with a high population of Indian professionals. The targets are Chicago; New York/New Jersey; Los Angeles; Houston; San Francisco; San-Diego; Phoenix; Salt Lake City; Seattle; Denver; Minneapolis; Milwaukee; St. Louis; Memphis; Atlanta; and Miami.

Annual Convention and Regional Seminars

Based on the efforts of the Washington Chapter and the preparations underway, the first ASEI convention to be held outside of Michigan promises to be a big success.

The Athens chapter held a mini-convention in Athens in May. The Michigan regional seminar planned for November '92 is now planned in Spring 1993. By holding the annual convention in the fall and regional seminars in Spring, ASEI activities will be better distributed throughout the year.

ASEI Procedure Manuals

A new chapter formation and administrative manual was prepared and issued for comments to Chapter Presidents. A similar manual is planned for Committee activities and for the Annual Convention activities. These guidelines will be helpful to new chapters and new volunteers and in addition will standardize ASEI activities.

Fund-raising

A donation of \$2,500 was received from Mr. Promod Rai Bhargava of Michigan Consolidated Gas Company. ASEI gratefully acknowledges the much needed contribution.

Our thanks to all Section Presidents and Officers, Committee Chairpersons, and Volunteers for their dedication and efforts throughout the year. We would also like to thank all ASEI members for your continued encouragement and support. Much more remains to be done. We look forward to your active involvement.

Sudhir K. Jain **President**

Shailesh Vora **Chairman of the Board**

With Best Compliments

from

ANAAR Company

Helping Businesses become Globally Competitive

J. Nirdosh Reddy

467 Laurelwood Ct. Bloomfield Hills, MI 48302 Phone: 313-335-9060 FAX: 313-335-5246

Help wanted

Project Managers, Project Planners, Cost Engineers, Estimators, Systems Analysts, Programmers, Technical Writers.

We expect more.



P.O. Box 2777 Ann Arbor, MI 48106 (313) 996-0500 (Fax) 996-0266

Attn: Mr. Sudhir K. Jain

ASEI-CHAPTER ACTIVITIES IN 1992

MICHIGAN

Members have been holding their regular monthly dinner meetings on the first Thursday of each month.

March The speaker was Mr. Hans Bajaria. He gave a delightful presentation on Quality Perspectives and Opportunities.

April The speaker was Mr. J. Bathena who shared his business experiences in Technology Transfer in both U.S. and India

May This meeting had two speakers. Mr. Sudhir Jain discussed the ASEI Idea document with the membership, followed by Mr. Ramesh Patel who spoke on Financial Planning. Ramesh offered numerous tips based on his personal experience and pointed out the following ten most common mistakes made by most people:

- 1. Failure to organize financial records. Without current records you're unlikely to realize all the tax advantages available.
- 2. Failure to set goals. If you don't know where you are going, how are you going to get there.
- 3. Setting unrealistic budgets.
- 4. Failing to establish and maintain credit in spouse's name. A sure way to intensify the trauma in the event of death or divorce.
- 5. Borrowing money for the wrong reasons. Credit card interest can double the cost of that expensive lunch, which is long forgotten by the time the bill arrives.
- 6. Failing to provide for a rainy day.
- 7. Basing investment decisions on tips, or making them under pressure.
- 8. Letting the money loaf. Put excess cash to work.
- Not having an up-to-date will.
 Giving too much money to the tax



Mr. Sudhir Jain, President of ASEI

collector. Take advantage of IRAs, deductions you have coming and talk over major financial decisions in advance with your CPA or Financial Planner.

June The topic was "How to do Business with TACOM; Section 8 (A) discussion and assistance available to all ASEI members". The speakers were Ms. Louise Lather, Small Business Advisor for TACOM and Ms. Annie Newell, the Ombudsperson for TACOM. TACOM, or the Tank Automotive Command is one of the largest U.S. Army procurement units in Michigan.

CCJM

Madhusudan C. Joshi Project Manager

C.C. JOHNSON & MALHOTRA, P.C.

Environmental Engineers & Scientists

601 Wheaton Plaza South Silver Spring, Maryland 20902 (301) 942-5600 • Fax (301) 942-8716

CUSTOM RESIDENCES
RESIDENTIAL ADDITIONS
OFFICE & RETAIL
SPACE PLANNING

703 491 2863



PRINCIPAL

BEST WISHES

from

System Development International (SDI)

15825 Shady Grove Road, Suite 100 Rockville, Maryland 20850 Tel: (301) 948-6699 Fax: (301) 948-7174

Attn: N. S. Viswanath

Best Compliments from

R. K. ENGINEERING & SURVEYING ASSOCIATES, INC.

Land Planning, Civil Engineering & Surveying

for

Commercial, Industrial & Residential Projects

Consulting Civil Engineers & Land Surveyors 42822 Mound Road Sterling Heights, Michigan 48314 Telephone No. 313/254-2080

RAJARAM KHATRI, P.E. & R.L.S.

Huntsville

The Huntsville Alabama Chapter of ASEI held its monthly meeting on third Sunday of each month, inviting a guest speaker. A brief synopsis of the monthly meetings follows:

January The topic was "Economic reforms in India and Opportunities for Non-Resident Indians" by Mrs. Meera Shankar, Minister of Commerce, Embassy of India, Washington D.C. Mrs. Shankar discussed the significant opportunities due to major changes taking place in India.

February This meeting was of interest to students, the topic "Immigration Matters/Permanent Residency Under New Laws". The speaker was Mr. Chandler Sharma, Partner – Smith, White, Sharma and Halpen, Atlanta, GA.

Mr. Sharma covered the changes in H-1B Visa and Labor certification, changes in employment based immigration and their requirements, changes in family based immigration; current labor department policies; and legal problems with INS and advice on their avoidance.

March "Investment Strategies for the 90's" by Mr. Rick Baker, Financial Consultant, Robinson Humphrey. Mr. Baker talked about the existing financial environment of low inflation, low CD and mortgage rates. He discussed a personal financial investment pyramid including strategies for tax-free investing, professionally managed money and balanced portfolio strategies.

April Mr. Chandler Sharma, an attorney and Mr. Branon Copeland, an insurance expert made presentations on Wills and Estate Planning respectively.

May Mr. S. Bowonder, Professor of Management at BEL made an excellent presentation on Prospects and Challenges to Trade and Investment in India.

Another meeting was held in the month of May on 31st. Ms. Susan Fillippeli, an Instructor in the Department of Communication at the University of Alabama was the guest speaker who made an effective presentation on "Effective Oral Presentation:

October A presentation on The Chamber of Commerce Economic Development Programs by Mr. Jeff Thompson, Director Small Business Development, Huntsville, Al.

Athens

The first student chapter of ASEI has been very active since its formation in July 1991. It provides a wide spectrum of information to the students of Ohio University. The activities included the followings:

January A seminar was held on Interviewing and Public Speaking. The speakers were Dr. Arvind Singhal, Mr. Anjali Ram and Mr. Mark Orbe, all from the School of Interpersonal Communication.

February A workshop on resume writing was conducted by Mr. Rob Moffat from the Career Planning and Placement Department of Ohio University.

May Athens Chapter held a well organized mini-convention attracting approximately 60 members. The convention was held on May 17th at the Ohio University. Several presentations covered both technical and career topics as highlighted below.

ASEI – Today and Tomorrow Mr. Sudhir Jain, President ASEI

Toughening of Structural Ceramics Dr. Nitin Padture, National Institute of Science & Technology, Gaithersburg

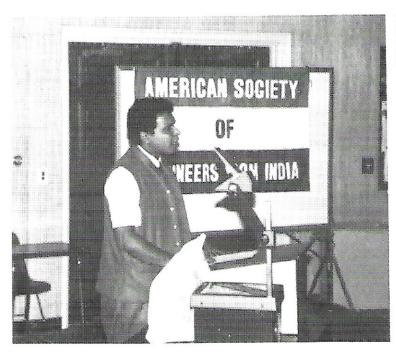
Object Oriented Programming Mr. Mangesh Karindikar, Dept. of Mechanical Engineering, Ohio University.





NW INDIANA CHAPTER - PICNIC JULY 1992

NATIONAL CAPITAL CHAPTER - SEMINAR MINORITY BUSINESS OPPORTUNITIES



ATHENS, OH CHAPTER - MINI CONVENTION



NATIONAL CAPITAL CHAPTER - SEMINAR BUSINESS OPPORTUNITY IN INDO-AMERICAN MARKET

Career Opportunities and Planning Dr. Shantaram Pai, NASA Lewis Research Center, Cleveland, OH.

It takes more than a good idea! Dr. Ashok Gupta, Professor of Marketing, Ohio University, Athens.

Expert Systems
Mr. Anil Malkani, Dept. of Electrical &
Computer Eng., Ohio University.

Neural Networks Mr. Manish Mehta, Dept. of Industrial & Systems Eng., Ohio University.

September Seminar on Presentation Skills by Dr. Arvind Singal

TOLEDO

The Toledo Ohio Chapter was formed in October 1990. Some of the major activities arranged by the Chapter have been:

Seminar on Creative Thinking Seminar on immigration matters Networking Career enhancement workshop

A Convention on resume writing, interviewing, job search technique, career planning, management of engineers, etc.

NW INDIANA

Activities of the Northwest Indiana, Munster, In Chapter of ASEI activities in 1992 included:

May Presentation by Dr. Bala V. Balachandran, Professor at Northwestern University, Evanston, IL on Cost Management Strategies, Development of More Functional, Useful and Integrated Cost System.

July A summer picnic at Indiana Dunes National Park.

October Seminar topic to be decided.

December Dinner and election.

NATIONAL CAPITAL CHAPTER

The National Capital Chapter located in metropolitan Washington, DC area holds bimonthly meeting on first Sunday of alternate months. The following seminars were held in 1992:

January A general get-acquanted meeting in which everyone shared his/her experiences at work.

March Dr. S. S. Lamba, Retired Manager and Chief Engineer of the Bhagra Nangal Dam (presently a Consultant to the World Bank) presented an eye witness description of water resources development in Northern India.

May The topic of the seminar was "Business Opportunities in the Indo-American Market" presented by Mr. Satyendra Srivastava, President of Advanced Computer Systems, Inc., specializing in software development, LAN administration and support, and system integration.

July A seminar on "Minority Business Opportunities". A national perspective on the subject was provided by Mr. Bharat Bhargava, Associate Director of the Minority Business Development Agency, US Department of Commerce. Mr. Thomas Davis, Chairman of the Board of Supervisors, Fairfax County talked about the same subject from a county perspective.

September Annual National convention on "Technology and Indian Economic Reform" consisting of technical presentations, student activities and gala award banquet.

BEST WISHES FROM



CBSI COMPLETE BUSINESS SOLUTIONS, INC.

SYSTEMS INTEGRATION PARTNERS

An International Company
Offering Its Clients Total Solutions
Of The Highest Quality

Recognized by INC. 500 and Michigan 100 Lists in 1990 & 1991

As One of the Fastest Growing Firms in the U. S. (over 500 employees)

To Reduce Information Management Costs The Leaders Rely on CBSI

30500 NORTHWESTERN HIGHWAY, SUITE 100 FARMINGTON HILLS, MI 48334 (313) 737-2088 (313) 737-2089 (FAX)

HIGH-TECH ADVANCES IN INDIA

India is steadily emerging as a "technological super power" in this part of the globe after breaking big power monopoly in the fields of nuclear energy, space, biotechnology, and deep sea mining. In purely scientific disciplines such as atomic energy, space, aeronautics, biotechnology, electronics, oceanography, non-conventional sources of energy and Antarctic expeditions, India's progress in these disciplines have been impressive. Among the major new R & D projects include development of superconductors to save energy, antifertility vaccine to check population growth, use of biotechnology to solve problems in medicine, agriculture and industry, development of rocket launchers an satellites and missiles and deep sea mining technology. India has also formulated an ambitious program to develop lasers and fiber optics technology to boost communications and use of yet smaller computers and other rewards still undreamed of.

In atomic energy, India has developed expertise in nuclear fuel cycle, created indigenous capabilities designing, construction and operation of nuclear power plants, and reprocessing of spent nuclear fuel. Capabilities have been created right from exploration and mining of atomic minerals, preparation of high purity nuclear materials production of fuel elements for reactors, production of heavy water, health and safety instrumentation to nuclear waste The management. most recent accomplishments relates to the commissioning of research reactors Dhruva and Fast Breeder Test reactor (FBTR).

Recent developments in the field of oceanography include nine expeditions to

Antarctica and establishment of two permanent bases there and development of know-how for extraction of metals from polymetallic nodules. Recently, the country has been registered by the United Nation as "Pioneer Investor" for deep seabed mining which gives it the exclusive right of exploring upto 1.5 lakhs sq. km areas in the central Indian ocean. An action program to extract metals from the sea has been formulated by the Department of Ocean Development which envisages development indigenous technology for carrying out deep sea mining by 1995. In the field of space research, India has now set to take complex missions like building Polar Satellite Launch Vehicle(PSLV), remote sensing satellites and indigenous INSAT satellites.

While improving the quality of life, considerable attention is needed to reduce the degradation of natural resources of productive land and making a massive effort at restoration. Similarly, major efforts are needed to free natural waters of pollution from industrial effluent. Soil conservation and water management have to receive much attention as also the improvement of hill areas for ensuring ecological balance.

These objectives require the application of the very best technology. In such programs, the most effective and efficient technological solutions have to be found, so that the maximum advantage is obtained from the use of financial resources.

(This excerpt was prepared by Chandrika Prasad from a similar article by Bal Krishna published in India Globe, August 15, 1992).

GROWTH OF US INVESTMENT IN INDIA

US investment in India picks up as economic reforms gain momentum. the Indian last year, Since July government has implemented a major program of radical economic reforms aimed at deregulating and liberalizing the Indian economy and integrate it with the global market place. The pace of reforms have been breathtaking. The Government has slashed red tape, liberalized trade, made export attractive through devaluation, wooed foreign investment, loosened interest rates and encouraged private business to replace the public sector as the dynamo of the It has built up its foreign economy. exchange reserves from almost nothing to more than \$4 billion.

The reform measures implemented in recent months have included: partial convertibility of Indian currency; additional steps to encourage foreign investment including in production, refining and marketing of oil and natural gas, and power; abolition of import licensing requirements, reduction of tariffs on imports; abolition of controls on Indian companies raising equity funds; slashing of maximum income-tax rate from 50 to 40 percent; abolition of wealth tax on financial assets; progressive disinvestment in public sector companies; drastic reduction in fiscal deficit; and declining defence spending.

A significant dimension of the ongoing reform program has been a determined effort to attract foreign investment. Policies implemented since last year include majority equity participation by foreign investors; automatic approval for technology agreements with foreign companies and abolition of industrial licensing requirements with only a few exceptions.

The initial response of foreign investors has been encouraging. The USA has emerged as the largest single investor. Major US companies which have signed contracts for investment include General Motors, General Electric, Ford Motors, Du Pont, Coca Cola, Motorola, IBM, and In the oil sector several Kelloggs. American companies including AMOCO, Atlantic Richfield, Albion International Resources and Pan Energy Resources have joined in the latest round of bidding for exploration and development. response to a successful US AIDsponsored seminar on the prospects for private investment in the lucrative power sector, many US companies have entered into negotiations with several government authorities private and companies in India.

(This write-up was prepared by Dr. Chandrika Prasad from notes from INDIA UPDATE published by the Embassy of India, Washington, DC).

NETWORKING

Company functions, conventions and business gatherings are great places to network and make contacts. But the opportunity can be wasted if you lack the skill needed to make contact.

People like to do business with people they like and feel comfortable with. Often, annual functions are the only time that people with like business objectives get a chance to meet and greet one another for an occasion unrelated to deadline and sales objectives. Attending a function with your co-workers, fellow managers, or clients can be a great way to know people and find out their interests in a relaxed setting. Such occasions can also help you to discover and to cultivate excellent career or business opportunities.

Business functions are a chance for companies to build staff morale and create bonding among employees. However, you can also use these occasions as a tool to gain knowledge about the company. Talk with people in other departments and get to know what they do.

However, heavy-duty business dealings should not be done at these social gatherings. Such discussions should be saved for the office. If you stumble across a potential business deal or potential client during a conversation, take the person's card and or number and contact them later. Here are some other techniques, do's and don'ts:

In advance of a gathering, get a hold of a list of attendees. Draw up a list people you want to meet and a few points you want to make to them. Practice describing your company in a sentence or two, and take along plenty of business cards.

Meet as many people as you can. Be the first to break the ice – introduce yourself, as well as others. Don't be shy. Starting conversations is easier when just a few people are in the room. Arrive early.

Make an effort to find out interests of others, but don't pry or be too pushy. Networking must be subtle; keep circulating-but don't try to meet everyone in the room if that will make you appear pushy.

Listening pays off as much as talking does. When you meet someone, ask What do you do? Who do you do business with? What do you need? This information tells you what you might offer that person.

To make your way uninvited into a conversation, ask permission. You could say, Excuse me. I'm interested in what you've been saying. May I introduce myself?

To remember the names of those you meet, repeat first and last names as you shake hands. Address people by their first name during the conversation and say the name again as you part.

Make some sort of promise to people with whom you want to stay in touch. For example, say you'll send them a relevant article or names of contacts they'd like to make. By keeping commitments, you prove your reliability and establish a relationship.

Your conversation should encourage others to open up and talk about themselves without threatening their sense of privacy. The best way to do this is to show genuine interest in them and their views and to not dominate the conversation by constantly talking about yourself. There should be some give and take, however. If you don't talk about yourself and your interests, why should they feel comfortable doing so? Also important is what not to talk about. Politics, personal finances, and religion are still taboo in most settings. And while it may not be a bad idea to listen don't contribute to the rumor mill.

Don't overstuff your plate or worse, get drunk.

Relax, have fun and work the room like crazy. Get to know the people with whom you have or can have business relationships. But don't forget to have a good time.

Finally, be realistic. Don't try to make a sale at every event you attend. The contacts you meet are the start of a process, not the end.

(Reprinted from ASEI's June Newsletter, Credit Sudhir K. Jain, President, ASEI)

THE SECRETS OF CAREER SUCCESS

After more than two decades of research on the subject of career success, I have concluded that people on the fast track are made not born.

As a group, fast-trackers are not any brighter than their slow-track colleagues. They didn't attend better colleges. And, biggest surprise of all, they don't work any harder.

The main difference: Fast-trackers advance within their companies because they know how to tap into critical resources. Slow-trackers often are not even *aware* that these resources exist.

Companies don't inform people about critical resources in their orientation materials. In fact, more than 90% of what you need to know to succeed is not published anywhere.

If you want to thrive in today's competitive corporate environment, you cannot simply play by the rules and keep your nose clean. Horatio Alger is dead, and he has been replaced by a fast-track breed that has mastered the hidden code for success.

The foundation: In virtually every case, fast-trackers are launched by bosses who invest in their subordinates future careers.

This goes beyond training a person to do the present job well. When a boss invests in a worker, the goal is to help the person outgrow the present job and move on to increasingly responsible positions within the company.

Are you on the fast track?

On average, the bosses studied engaged in these critical actions with 64% of their fast-trackers, but with only 27% of their slow-trackers.

You can be confident you're on the fast track if your boss...

Provides you with special information that allows you to learn how the company really operates.

Warns you about changes to be made within the organization.

Assigns you challenging tasks.

Advertises your strengths to higher management.

Prepares you to handle more difficult assignments.

Helps plan your long-range career.

Gives you enough authority to complete important assignments.

Notifies you about promotion opportunities.

Warns you in advance Fand in confidence about your career problems.

Asks for your input in decisions for which only the boss is responsible.

GETTING YOUR BOSS TO INVEST IN YOU

In deciding which of their subordinates to select for the fast track, bosses seek several qualities above all others:

Decision-making similarity. Given the same complex problems, the boss and subordinate will make the same decision. They view the company, its markets and its constituents from similar perspectives.

Dependability. In an emergency, the boss can count on the subordinate to complete an assignment the boss started. The subordinate rises to the occasion in times of crisis.

Positive collaboration. The boss and subordinate have an effective working relationship. They communicate well and coordinate their efforts efficiently.

Beyond excelling in these critical areas, potential fast-trackers can boost their chances of selection and investment by:

Learning about their organization beyond their job requirements.

Telling their boss they want extra work.

Making their boss look good.

Giving their boss credit in the presence of other people.

HOW FAST TRACKERS ADVANCE

Fast-trackers engage in several activities more often than their slow-track colleagues. To get (or stay) on the fast track:

Demonstrate initiative. Show the boss that you're eager to outgrow your job. Identify problem areas and act to correct them.

Exercise leadership. Help co-workers perform their jobs more efficiently, and provide direction when necessary. Offer to take charge of special projects, such as inter-departmental task forces.

Take risks. Let your boss know about problems in the work unit. Take stands you think are correct, even if you're bucking the tide. Admit your mistakes and show what you've learned from them.

Add value to your work. Go beyond your job description. Write unsolicited reports that can help your boss make improvements in your unit.

Persist on a project. If an assignment appears to be going nowhere, try to view it in a new way.

Seek opportunities for self-improvement. Request special training or take on assignments that require the use of new skills. Ask your managers to define your strengths and weaknesses so that you can improve.

Build competence networks. Find out who is responsible for getting things done in the organization. Then initiate relationsips with these people by offering favors or providing information. *Result:* You'll compile credits with these people that can translate into critical resources down the road.

Influence others. When co-workers come to you for help or advice, deal carefully with each persons problems.

Resolve ambiguity. When a boss makes an ambiguous request, gather as much information as possible from other sources. Make educated assumptions (when necessary), and approach the boss for *brief* feedback regularly throughout the assignment.

Seek wider exposure. Learn more about the company by associating with managers outside your department.

Build up and build on existing skills. Keep up with technical advances in your field.

Develop a close working relationship with the boss. This cannot be overemphasized. Volunteer favors and information. Take an interest in the boss's family and career. To avoid being obvious or causing resentment: Show an interest in your co-workers as well.

Help the boss. When you help make the boss look good, the boss will be more likely to take you along as he/she advanced through the organization.

(Reprint from ASEI's June 1992 Newsletter) (Credits: Mr. George B. Graen, University of Cincinnati; author of the book,)

BUSINESS PLANS: blueprint for success

If you think a business plan is something you need only when you want to raise money, think again. Knowing where you are headed and how you plan to get there is essential to the day-in, day-out management of any successful enterprise, according to business consultant Ted Burbank, president of The Burbank Group in Shrewsbury, MA. "A ship without a destination may be lucky and drift into a fine harbor, he says, but more often it will find nothing but the coastline, or worse, founder on some rocks."

Just what is a business plan, and how do you use it to chart your course? Its a document that lays out your strategy, looks two or three years into the future and describes the steps your firm will follow to go from here to there. A business plan is, of course, essential for a startup hoping to attract capital from investors or for any outfit trying to pry loose a line of credit from a bank.

Many owners don't bother preparing a plan if they're not looking for money. "Often owners have a strategy in their head, but don't think its worth the time to lay it out in a comprehensive statement," claims management consultant Paul Parish, a partner in the Denver office of the accounting firm Grant Thornton.

That's a mistake, say Parish and other experts, because going through the process of putting together a business plan is extremely useful. Writing the sections of the document forces you to rethink all aspects of your enterprise—always a valuable exercise. "For example, you will examine your key weaknesses, so when you come up against a downturn in your market or a tough competitor, you won't have to react in a crisis mode" explains Victor V. Coppola, partner in charge of the emerging business—service practice of the Philadelphia office of the accounting firm Coopers & Lybrand.

Use your plan to hold yourself and your staff accountable. Check at least monthly to see which operations are doing better or worse than planned and take corrective action when needed. "The business plan gives you something to refer back to when you're judging the performance of your firm and management team," says Hugh Frisbie, a partner with the accounting firm McGladrey & Pullen in Schaumburg, IL.

Writing your business plan

A plan should be concise. As with most written documents brevity is a virtue. "Leave the details, such as sales assignments or technical matters, for the operations people to deal with separately," advises Coppola. "keep it simple," concurs Parish. "Strive to keep your plan to 10 pages or less."

Involve key employees in the preparation of the document. Says Parish, "You should work through each chapter of the plan with them, asking questions like, 'What exactly are we selling? Are there any new markets we would like to be in? How about new geographic territories? What mix of products, old and new, do we want to pursue in the next few years?"

Share the plan with your business advisers: members of your board, your accountant, and your attorney. "They have different perspectives," Frisbie says. "For instance, they may want to know how you will achieve 15 percent growth if the economy is likely to remain flat next year."

Then take your plan to some outsider whose opinions you value and ask them to appraise it. One of these should be your banker. "It will make that banker a part of your team," Frisbie says. "he'll feel he's not going to be surprised by anything that may happen to your firm down the road."

In some cases, it may even be beneficial to share the business plan with one or two prime customers or suppliers – so long as no proprietary information is revealed. They may appreciate your show of confidence in them and respond with useful suggestions.

Revise your plan annually, starting at around the end of the third quarter. At this point, you will have a fix on the current year's results and can begin to see what's coming the following year.

What to include

Business description. Start with a brief description of your company, including its history, the products or services it provides, and its markets. Spell out goals for short—and long—range growth in terms of projected sales volume.

Identify the competitive advantages enjoyed by your enterprise. They may include, for example, proprietary technology, the expertise of your employees or strong brand-name recognition. Explain how you will fend off competition. List your company's principal weaknesses and show what you will be doing to remedy them.

Marketing and Sales. Describe the way you will meet your goal for sales growth. According to Frisbie, the issue boils down to this: "How are you going to pick up new customers and new business in the coming year?" If you will introduce a new product, for instance, this section should discuss how it will be marketed and who on your sales staff will be responsible for selling it.

This is the place to present any price increases you are planning and what effect they might have on unit volume. If, let's say, your goal is 15 percent sales growth, you should say how much of that will come from higher prices or markups and how much from increased unit volume.

Operations. Business activity has to support planned sales volumes. Outline in this section any major changes you'll be making

in operations to match the expected level of business activity. If sales are going to rise by 15 percent, for example, you may need to expand warehouse space, install new computers, or add an important piece of production equipment. Estimate installation charges and the cost of training personnel, as well productivity gains resulting from such changes.

Management. This section has two parts: a list of your key employees and their skills and experience; and a discussion of expected staff requirements and the way you will meet them. "You need to demonstrate that you have a well-balanced management team in place, and if you don't how you plan to add the people you need," says Coppola. This is the place to assign accountability among managers for implementing the strategies and achieving the goals set forth earlier in your document.

Financial projections. This portion of the plan projects the current and coming years' revenues and profits and includes such basic information as your firm's balance sheet, income statement and statement of cash flow. Make sure the numbers are consistent with assumptions in the earlier sections. Be liberal when assessing the cash needed for growth. Unfortunately reports Coppola, "Entrepreneurs tend to underestimate financing needs by 50 percent."

Executive summary. When you have finished the sections listed above, prepare a one-page summary outlining the highlights of your plan. Use this as the preface to the document.

And finally

Give your top managers a copy of the completed plan. After all, they will be putting it into practice.

(Reprint from ASEI's June Newsletter)

(Source: Extracted from Your Company, Winter 1992 issue; written by Douglas Bartholornew)

INDIA'S NEW ECONOMIC POLICY

The new industrial policy initiaves have been designed to deregulate the industrial economy in a substantial manner. Here are some of the highlights:

DEREGULATION OF INDUSTRIES FOR THE PUBLIC SECTOR

Since 1956, 17 areas were reserved for investment by the public sector. Now only 8 areas are so reserved.

ABOLITION OF PHASED MANUFACTURING PROGRAM

The abolition of Phased Manufacturing Program removes a major irritant that a large number of firms have felt in terms of discretionary power and Government's interference in business decesions. With the removal of the need for import licenses for a large part of raw materials, intermediate goods and components, there is no need for enforcing local content requirements on a case by case adminstrative basis.

REMOVAL OF MANDATORY CONVERTIBILITY CLAUSE

The financial institutions will nolonger impose the mandatory convertibility clause that they used to include in their lending operations for new projects. The use of this clause had provided them an option of converting their loans into equity it felt necessary by their management.

REMOVAL OF INVESTMENT CONTROL ON LARGE BUSINESS HOUSES

Since the enactment of the Monopolis and Restrictive Trade Practice Act (MRTP ACT) in 1979 all firms with assets above a certain size (Rs. 1 billion since 1985) have been classified as MRTP firms and were permitted to enter a selected list of industries only and this also on a case by case approval basis. In addition to control through industrial licensing, seperate approvals were required by such large firm. But no more under the new policy.

FOREIGN INVESTMENT POLICY

In the case of foreign investment, automatic

permission will be available for foreign equity upto majority 51% equity share in the list of high priority industries referred to as Annex III. This is a major departure from the existing policy which had limited the foreign equity to only 40%. This policy so far has generally discouraged foreign equity holdings in service areas except for hotels. In addition to hotels, 51% equity share will be welcomed in other tourist related areas.

The procedures for hiring of foreign technicians and also for the testing of indigenously developed technology abroad had required case by case approval by the Government. Henceforth, no such permission will be required.

The new policy will remove the delay and uncertainty which had clouded the relationships between Indian and Foreign firms.

FOREIGN TECHNOLOGY AGREEMENTS

Automaic permission will be given for foreign technology agreements in high priority industries (Annex III) upto a lumpsum payment of Rs. 1 crore, 5% royalty for domestic sales and 8% for exports, subject to total payments of 8% of sales over a 10 years period from date of agreement or 7 yrs from commencement of production.

In case of industries other than Annex III, similar automatic permission will be given if there is no free foreign exchange required for any payments.

All other proposals will require specific approval under general procedures in force.

No permission will be required for hiring foreign technicians and indigenously developed technology. Payments could be made from blanket permits or free foreign exchange according to Reserve Bank Of India guidelines.

PUBLIC SECTOR

Portfolio for public sector will be reviewed with a view to focus the public sector on strategic, high tech and essential infrastructure. Whereas some reservations are retained, there would be nobar for areas of exclusivity to be opened up to the private sector selectively.

(Prepared by Chandrika Prasad from materials provided by the Embassy of India)

LIST OF INDUSTRIES FOR WHICH LICENSING WILL BE COMPULSORY(ANNEX II)

- 1. Coal and Lignite.
- 2. Petroleum(other than crude) and its distillation products.
- 3. Distillation and Brewing of alcoholic drinks.
- 4. Sugar.
- 5. Animal fats and oils.
- 6. Cigar and cigarettes of tobacco and tobacco substite.
- Asbestos and asbestos-based products.
- 8. Plywood, decorative venners, particle board, fiber board, block board.
- 9. Raw hides and skin, leather, chamois leather and patent leather.
- 10. Tanned or dressed furskins.
- 11. Motor cars.
- 12. Paper and Newsprint except bagasse-based units.
- 13. Electronic, aerospace and defence equipment of all kinds.
- 14. Industrial Explosivesincluding detonating fuses, safety fuses, gun powder, nitrocellolose and matches.
- 15. Hazardous Chemicals
- 16. Drugs and Pharmaceuticals

LIST OF INDUSTRIES FOR AUTOMATIC APPROVAL AND FOR 51% FOREIGN EQUITY APPROVALS (ANNEX III)

- 1. Metallurgical Industries (ferro alloys, castings, forgings, pig iron etc.)
- Boilers and steam generating units.
- 3. Prime movers (industrial turbines, IC engines, solar energy equipments...)
- 4. Electrical Equipment for transmission & distribution of electricity.
- 5. Industrial machinery and equipment.
- 6. Machine tools, robots, controls, jigs, fixtures
- 7. Agriculture machinery (tractors, rice transplanters)
- 8. Earth moving machinery.
- 9. Industrial instruments (temp., press., weight, flow regulators)
- 10. Scientific and electromedical equipments
- 11. Nitrogenous and Phosphatics fertilizers
- 12. Chemicals (petrochemicals.
- 13. Drugs and Pharmaceutical allowed by Drug Policy.
- 14. Paper and pulp including industrial laminates.
- 15. Automobile tires and tubes, industrial belts & conveyors, hoses, plastics....
- 16. Plate Glass including those for television tubes, HT insulators, fibers.
- 17. Ceramics for industrial uses
- Cement products.
- 19. Hybrid seeds.
- 20. Food processing industries except those reserved for small-scale sector.
- 21. Food packaging except those reserved for small-scale sector
- 22. Hotel and tourism related industries.

Many more, complete list available from Indian Embassy Commerce Department.

1992-93 membership benefits guide

Networking

ASEI offers a unique opportunity to you to make contacts and network with fellow professionals who share your interests. Networking leads to mutually beneficial opportunities and relationships.

Conventions

Each year ASEI holds a nationwide annual convention. Conventions and workshops are also held locally by each chapter. Recognition is provided to outstanding people through awards.

Local chapter meetings

Local chapters provide members the opportunity to meet each other, network, communicate/generate new ideas, attend career development seminars, build beneficial relationships and learn from each other. Chapter meetings are geared towards the needs of the members. Periodically, plant tours, mini-conventions and development workshops are conducted. Monthly programs emphasize business/consulting topics, career development topics or immigration/interviewing/resume topics, depending on the chapter membership interests.

Committees

Committees are charged with the responsibility to accomplish specific ASEI goals which are common to all chapters. Committees can also be looked upon as the R & D arm of the chapters. Committees develop programs or workshops that can be used at the chapter level or at annual conventions. Members are encouraged to actively serve on committees.

Careerenhancement

ASEI assists each member by career planning and enhancement assistance. Two key programs are customized workshops (at local chapter meetings and at the annual convention) and mentoring programs to personally discuss career issues.

Member directory

The ASEI directory can help you find fellow members. Information is also available on company affiliations and expertise. The directory is updated annually. ASEI sends a free directory to all members.

Employment assistance (future)

Referral assistance is provided to members looking for work. Employers are encouraged to recruit ASEI members through job fairs and to meet their minority hiring goals.

Publications

ASEI plans to make available publications on relevant subjects such as career development, tech transfer and immigration to its members. These publications will be developed by ASEI committees.

Corporate membership

Corporate membership is open to companies actively engaged in engineering, architecture and related arts and sciences. Benefits include up to \$150 credit toward your first display ad in the monthly newsletter, exclusive access to a no-fee professional employment placement service, a \$100 credit toward your first display ad in the annual convention brochure, discounted rates for exhibit space at annual and local conventions, and a Corporate Member listing in the membership directory.

Technology transfer

ASEI assists Indian and U.S. companies by bringing together technology experts in the desired industry. Lists of experts, businesses and technical articles are maintained. Technology liaison is maintained with Indian organizations and with other associations in the U.S.

Trade Assistance

ASEI plans to acquire and catalog trade laws and policies. Facilitation assistance is provided to trade delegations from Indian or to U.S. companies.

Business and consulting

This committee assists business and consulting firms in areas of mutual interest.

Student affairs

ASEI assists students by providing scholarships, opportunities for contact with businesses (job search), in immigration matters (workshops) and other beneficial services such as resume writing, career planning and individual guidance and mentoring.

Newsletters

The newsletter is sent to all members and is intended to be informative and educational. It communicates key events and news.

Scholarships and awards

Student scholarships are awarded based on merit and need. ASEI recognizes outstanding individuals for their professional and entrepreneurial contributions.



Membership form

1. Name: Mr/Mrs/Ms							10. Educational
	Last		First		Middle Initial		Background: (choose all that apply)
2. Type of Membership:		A. Regular \$25/year	B. Life \$250	C. Student \$10/year	D. Corp \$250/ye		A. Aerospace
3. Spouse: Mr/Mrs.	Last		First		Middle Initial		B. Architecture C. Business D. Chemical
4. Home Address:	Street				Middle mila		E. Civil F. Computer Science G. Electrical/Electronics
N	City		State		Zip Code		H. Industrial I. Mechanical J. Sciences Z. Other (specify)
Phone:	Office			Residence			
5. Self employed?		Yes	N	o			11. Which of the following best describes your position?
6. Employer:							
7. Office Address:	Street						A. Consultant B. Engineer/Scientist C. Manager/Director D. President/VP
Phone:	City		State		Zip Code		E. Professor/Associate/ Assistant F. Programmer/Analys Z. Other (specify)
8. Years of Experience:		A: 0–1	B: 1–5	C. 5–10	D: 10–20	E: 20+	12. Which of the following
9. Highest Educational C	(ualificati	on: (choose on	y one)				best describes your job function?
	A. Bach	elors B. A	lasters	C. Doctorate	D. Post Doc	torate	
13. Which year did you b	ecome ar	n ASEI member?					A. Accounting/Finance B. Administration/Mgmt C. Consulting
14.Amount enclosed:	s						D. Drafting/Design E. Education/Training
15.Alma mater in India					Class of 19		F. Engineering G. Manufacturing
Membership dues and oth to ASEI and mail to:	er contri	butions to ASEI	are tax deduc	tible. Please ma	ake your check	payable	H. MIS/DP I. Purchasing J. Quality/Process
	ASEI P.O. Box Troy, MI						K. R & D L. Sales/Marketing M. Telecommunications Z. Other (specify)
Signature:					Datos		



Corporate membership

Special advantages of corporate membership

- Up to \$150 credit for your first display advertisement in the ASEI monthly newsletter.
- Exclusive access to a no-fee professional employment placement service.
- A \$100 credit for your first display advertisement in ASEI's annual convention brochure.
- Corporate Member discounted rates for exhibit space at annual and local conventions.
- Listing in Member Directory as Corporate Member.

Conditions of corporate membership

Membership is open to companies actively engaged in engineering, architecture and related arts and sciences. Annual dues are \$250. Dues are deductible as an ordinary and necessary business expense for income tax purposes, but are not deductible as a charitable contribution.

Membership agreement

I accept this invitation to become a Corporate Member of ASEI, American Society of Engineers from India, on behalf of:

Company Name	Division	-
Representative's Name	Title	
Company Address	City	State
Signature	Business Phone	Zip
Number of professional engineering/technical employees		

Please make check payable to ASEI and mail to:

ASEI P.O. Box 98 Troy, MI 48099

(313) 769-2383 (313) 769 -4983 (FAX)

GUPTA PERMOLD CORP.

World Class Manufacturers of:

ALUMINUM PERMOLD CASTINGS

Used in machines and equipment for Industrial Controls, Motors, Pumps, Subway Trains, Forklifts, Aircraft, Gear Cases, etc.

BRAKING RESISTORS

For Rapid Transit Vehicles

TRACTION GEARS

For Subway Trains and Trolleys

MOTOR/COMPONENTS

For Monorail and Metro Trains

WOOD PRODUCTS

For Industrial Packaging



234 Lott Road, Pittsburgh, PA 15235 U.S.A. Phone: (412) 793-3511 FAX: (412) 793-1055

WITH

COMPLIMENTS

FROM

BANSAL

Consuiting Engineers

& ASSOCIATES INC.

VED P. BANSAL, P.E. President

(703) 823-4694

Facsimile (703) 823-4697

50 South Pickett Street Suite 116 Alexandria, Virginia 22304

BEST WISHES

from

Dr. Chandrika Prasad and

Mrs. Urmila Prasad

(301) 464 - 5042

YOUR SOLUTION TO A HEALTHIER ENVIRONMENT

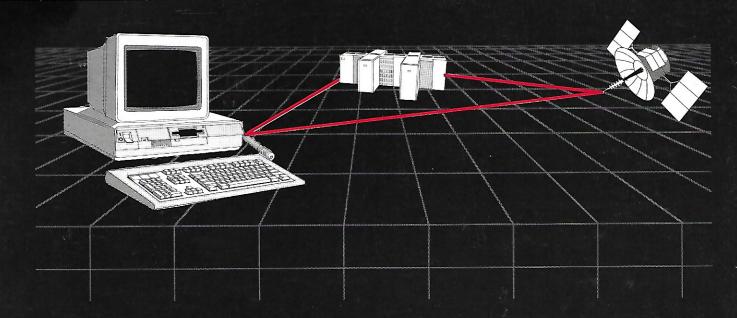


OVER 11 YEARS OF PROFESSIONAL EXPERIENCE

ENVIRONMENTAL CONSULTING
SITE REMEDIATION
GEOTECHNICAL ENGINEERING
FIELD SUPPORT SERVICES

A CERTIFIED MINORITY BUSINESS ENTERPRISE

9123 OLD ANNAPOLIS ROAD COLUMBIA, MD 21045,(410) 992-5200



DESIGNING TOMORROW'S DATA SOLUTIONS TODAY

Advanced Computer Systems

The combination of ACS's experience and growth is positioning the company as a major provider of data processing, telecommunications, and information systems to an expanding Federal Government customer base.

Market Areas

Software Development,
LAN Administration and Support,
Data Center Management,
Systems Integration, and
Program and Technical Support.

Prime—Subcontractor Teammate with Graduating 8(a)s and Large Prime Contractors

ACS's philosophy revolves around dedication to quality, responsiveness, innovation and customer satisfaction. This philosophy has resulted in repeat business and numerous customer awards and citations. ACS stands ready to apply its resources and philosophy to benefit your organization.



Advanced Computer Systems, Inc.

10530 Rosehaven Street • Suite 520 Fairfax, Virginia 22030 Phone (703) 591-4000 • FAX (703) 591-5591