



ISA Delhi Section

# PETROLEUM & POWER AUTOMATION MEET 2019

**“INNOVATIVE AUTOMATION FOR SAFE &  
RELIABLE OPERATION”**

**3<sup>rd</sup> and 4<sup>th</sup> May 2019**  
( FRIDAY & SATURDAY )

**Venue: Hotel Taj Palace, Sardar Patel Marg, New Delhi**

**An annual event by International Society for Automation (ISA) Delhi Section**

*ISA -Setting the Standard for Automation*

**Standards**  
**Certification**  
**Education & Training**  
**Publishing**  
**Conferences & Exhibits**







बी. वी. राम गोपाल  
निदेशक (रिफाइनरीज़)

**B. V. Rama Gopal**  
Director (Refineries)

इंडियन ऑयल कॉर्पोरेशन लिमिटेड

रिफाइनरीज़ मुख्यालय : स्कोप कॉम्प्लेक्स, कोर-2  
7, इंस्टिट्यूशनल एरिया, लोधी रोड, नई दिल्ली-110 003

**Indian Oil Corporation Limited**

Refineries Headquarters : SCOPE Complex, Core - 2

7, Institutional Area, Lodhi Road, New Delhi - 110 003

Phone : +91-11-2436 1364, 2436 1938

Fax : +91-11-2436 4356

E-mail : ramagopalbv@indianoil.in

Website : www.iocl.com



## Message



I am pleased to know that ISA Delhi Section is organizing "Petroleum & Power Automation Meet 2019" in Delhi on 3<sup>rd</sup> & 4<sup>th</sup> May 2019. The efforts put by ISA Delhi Section in bringing all stakeholders viz. End Users, Consultants, EPC Companies, Manufacturers, Field Instruments & System Vendors, System Integrators and other relevant stakeholders pertaining to Instrumentation & Control on single platform for Power and Oil & Gas sector, are indeed commendable. I congratulate ISA Delhi Section for hosting this all India event which is of prime importance to the entire Energy Sector.

At present India is a significant player in Global Energy scenario. We are net importers of Crude and LNG whose demand is on the rise. With many refinery revamps and new ongoing projects, India is emerging as Oil and Gas major. India has also shown steady growth in Power sector with focus on development of Solar Power Energy, Atomic Power Plants and other renewable source of energy.

Both Oil & Gas and Power sector needs highly qualified experienced and trained professionals to drive the industry in safe and efficient manner. The challenges in meeting the environment regulations have opportunities of innovation & automation. I hope this knowledge sharing event would add a lot of value to all the participants from these sectors and go a long way in bridging the gap between professionals from these domains.

I extend my best wishes for the success of this "Petroleum & Power Automation Meet 2019".

Best Regards,

B V Rama Gopal





**INDRAPRASTHA GAS LIMITED**

*(A Joint Venture of GAIL (India) Ltd., BPCL & Govt. of NCT of Delhi)*

## Message

I sincerely appreciate the efforts being put up by ISA Delhi Section in organizing all important automation conference this year. Such a focused dedicated Automation Technology campaign, in the critical sectors of Petroleum and Power, is very much needed to accelerate the transformation of the infrastructure sector in India, as automation is one of the key enabler for efficiency, safety, innovations and above all sustainability of these industry domain.

Indian market, despite its complexity and regulatory challenges, is inviting national and international players who have the expertise to take up the Automation technology to the next level. As the rapidly expanding power and petroleum sector offers abundant opportunities for the qualified, talented, capable engineering professionals, this knowledge sharing event, I am sure, therefore would add a lot of value to all the participants from these sectors.

It is also note-worthy that through such seminars, ISA Delhi Section is striving to facilitate through integrated automation, the realization of world class plants in India with green, clean and lean visualization. We are proud of our established global benchmarks in power and petroleum industries in terms of both reliability and cost competitiveness.

I wish ISA Delhi Section members and all the participants in this event, great time ahead

E S Ranganathan  
Managing Director



इंडियन ऑयल कॉर्पोरेशन लिमिटेड

रिफाइनरीज़ प्रभाग : स्कोप कॉम्प्लेक्स, कोर-2  
7, इंस्टिट्यूशनल एरिया, लोधी रोड, नई दिल्ली-110 003

**Indian Oil Corporation Limited**

**Refineries Division** : SCOPE Complex, Core-2  
7, Institutional Area, Lodhi Road, New Delhi - 110 003  
Tel. : 91-11-24361205 Fax : 91-11-24361783  
E-mail : chopras@indianoil.in  
Website : www.iocl.com



सुरेश चोपड़ा  
कार्यकारी निदेशक (परियोजना)

**Suresh Chopra**  
Executive Director (Projects)

## Message



I am pleased to see an overwhelming response towards this unique unprecedented platform of Petroleum & Power Automation Meet – a Mega attempt on Technology sharing between the Users and the Producers.

The efforts being put up by ISA Delhi Section are appreciated in organizing “**Petroleum & Power Automation Meet-2019**”. Such a focused dedicated Automation Technology campaign, in the critical sectors of Petroleum and Power, is very much needed to accelerate the transformation of the energy sector in India.

Indian market, despite its complexity and regulatory challenges, is inviting national and international players who have the expertise to take up the Automation technology to the next level. As the rapidly expanding power and petroleum sector offers abundant opportunities for the qualified, talented, capable engineering professionals, I am sure that this knowledge sharing event would add a lot of value to all the participants from these sectors.

I extend my best wishes for the success of this “Petroleum & Power Automation Meet 2019”.

*Chopra*  
(Suresh Chopra)





A Maharatna Company

एम. चन्द्रशेखरन

कार्यकारी निदेशक (क्यू.ए. एण्ड आई.)

**M. CHANDRASEKERAN**

Executive Director (QA & I)

एन टी पी सी लिमिटेड

भारत सरकार का उद्यम

**NTPC Limited**

A Govt. of India Enterprise

(Formerly National Thermal Power Corporation Ltd.)

केन्द्रीय कार्यालय / Corporate Centre



## Message

I am glad to note that ISA Delhi Section is organizing the PETROLEUM & POWER AUTOMATION MEET, PPAM 2019 on the 3<sup>rd</sup> May. I also understand that this has been the practice since last 10 years which is commendable. I am informed that the event is a keenly awaited one attracting more than about 200 participants from Power and Petroleum sector. Such events aid in sustaining a learning environment helping the sectors to perform increasingly better.

Operating and maintaining fossil fuel fired power plants is becoming increasingly challenging due to stricter norms imposed by the regulating authorities. Also, the customers are increasingly forcing the operators to find more efficient ways to run the plant making use of the latest technologies. Given that the field of automation has advanced dramatically in the last few years, it is important that the power sector exploits the technology fully to be able to run its operations more efficiently, even while maintaining stricter environmental norms.

I am informed that the two days' session covers variety of topics including interactions with technology providers. A panel discussion is also on the agenda providing a meeting ground for the various thought leaders to publicly exchange their ideas.

Let me wish the meet all the success and hope that the momentum will be maintained in years to come.

M Chandrasekeran

इंजीनियरिंग ऑफिस कॉम्प्लेक्स, ए-8ए, सेक्टर-24, नोएडा (उ०प्र०) पिन : 201301

Engineering Office Complex, A-8A, Sector-24, NOIDA-201301 (U.P.)

TEL. Off. : 0120-2410788, E-mail : mchandrasekeran@ntpc.co.in

पंजीकृत कार्यालय - एन टी पी सी भवन, स्कोप कम्प्लेक्स, 7, इन्स्टीट्यूशनल एरिया, लोधी रोड, नई दिल्ली-110003

REGD. OFFICE : NTPC BHAVAN, SCOPE COMPLEX, 7, INSTITUTIONAL AREA, LODHI ROAD, NEW DELHI-110003





## ISA DELHI SECTION

ASIA PACIFIC DISTRICT 14

### Message



Petroleum and Power Automation Meet (PPAM) 2019 is an attempt to bring together all the stakeholders of Automation fraternity including the End Users, Consultants, Technology Providers and not the least the budding youthful Engineers in the varied industry domains under one platform to the forefront of technology and performance leadership. I strongly believe that a participative and consultive approach jointly deliberated among all the stakeholders brings the best solution. Information partaking and uninterrupted insight of technology leaders is the key to success for any industry domain including Automation. This year the platform of PPAM 2019 is an endeavor for Innovative Automation for safety & reliable operation in Petroleum and Energy sectors to challenge and excel next level of performance, availability, reliability and safety through automation. With the event being attended by the pioneers of Automation industry from India and abroad to identify a future course of automation industry in India, I feel that this forum will add value for all the participants.

The year 2018-2019 has witnessed ISA Delhi Section reaching greater heights by successfully adding new members and conducting monthly Technical Meets every month. Further successful conduction of Fertilizer Symposium - 2018 during this year has added a bright feather in the cap of ISA Delhi section.

Also considering that the current scenario Industrial Internet explosion, Safety & Reliability, Information Technology and economic trends, PPAM 2019 is the ideal platform of for Indian industries to get the right interface between the automation fraternity, end users, R&D labs, academia as well as the policy makers and regulators in this sector.

Knowledge sharing and continuous engagement of technology leaders is the key to success for any domain including Automation. Like in the past many years ISA Delhi section has displayed its commitment to propel innovative technologies, I am sure that this year also the experts and peers of the industry will be able to discuss over the common issues.

I look forward to an enriching two day session where all the participants, delegates, exhibitors, students, academicians and the experts are able to add value in the field of Automation and enrich each other.

( M K Srivastava)  
Hony. President  
ISA Delhi Section





## ISA DELHI SECTION

ASIA PACIFIC DISTRICT 14

### Message



For ISA Delhi section year 2018-19 has been very happening and successful as many new organizations and individuals members joined us to participate and contribute in monthly Technical Presentations and annual events like Fertilizer Symposium. Now it is turn of coveted annual Mega Event Petroleum and Power Automation Meet -2019.

This year Petroleum and Power Automation Meet -2019 is focused on Innovative Automated solutions for safety & reliable operations in entire Energy Sector. The event is attracting participation from well-known industries operating in the field of Automation in India as well as from abroad. I am hopeful this mega show will add value to entire value chain from suppliers, service provider to end users.

With the emergence of new technologies like IIOT, IOT, Cloud Computing, AI, and in case of critical plant operation Digital Twins are changing shape of control rooms, control panels, HMIs etc. In such a rapid changing scenario, knowledge sharing and regular engagement with technology leaders have become necessary to remain updated. Events like Petroleum and Power Automation Meet -2019 provides immense opportunities for Automation professionals and entire industry value chain to share latest technology and other recent development in the field of Automation.

I am looking forward for very interactive and engaged sessions where all the technology providers, delegates would be contributing their best.

(Sushil Kumar)  
Vice President  
ISA Delhi Section





## ISA DELHI SECTION

ASIA PACIFIC DISTRICT 14

### Message



The year 2018-2019 has been a very successful year for ISA Delhi Section where in many new members joined hands to participate and contribute monthly Technical Meets every month and outstanding Fertiliser Symposium -2018 that were held during the year, which has set the tone for the Mega Event of Petroleum and Power Automation Meet (PPAM) 2019.

This year the platform of PPAM 2019 is an endeavor for Innovative Automation for safety & reliable operation in Energy sector in order to create performance headship with safety. With the event being supported by the pioneers of Automation industry from India and abroad, I feel that it will be able to add value for all stakeholders including the end users, suppliers and engineering companies.

Knowledge sharing and continuous engagement of technology leaders is the key to success for any domain including Process Automation. Like in the past many years ISA Delhi section has displayed its commitment to cabinet innovative technologies, I am sure that this year also the experts and peers of the industry will be able to discuss over the common issues. Also considering that the current technology trends of Internet explosion, Industrial Internet of Things, Cloud Computing, Digital Twins shall provide the technical as well as economical benefits of the same will be providing a right interface between the automation fraternity as well as the decision makers and stakeholders in this sector.

I look forward to an enriching two day session where all the participants, delegates, exhibitors and the experts are able to add value in the field of Automation for each other.

( Sachin Joshi)  
Hony. Secretary  
ISA Delhi Section





## ISA DELHI SECTION

ASIA PACIFIC DISTRICT 14

### Message



The dynamics of Energy Sector are changing at a rapid rate, the quest for having sustainable and environmental friendly solutions is pushing the envelope to new frontiers. The national and international organizations in this sector are facing new challenges but at the same time they are putting lot of effort in developing their expertise to have efficient and sustainable solutions. Petroleum and Power Automation Meet (PPAM) 2019, like its predecessor the past, will offer new opportunities to the professionals in automation field associated with Power and Oil & Gas sectors. This knowledge sharing event has potential to add value to the professional skills and bring about innovation in their work areas.

The efforts being put by ISA Delhi Section for such a focused event "Petroleum & Power Automation Meet 2019" in Delhi on **3<sup>rd</sup> and 4<sup>th</sup> May 2019** are commendable. Automation is the key enabler for increased productivity, efficiency, reliability & safety of Oil & Gas and Power industry.

It is also note-worthy that through such seminars, ISA Delhi Section is striving to facilitate the realization of world class production facilities in India. The efforts are also contributing in developing core expertise in various facets of automation which are in turn enhancing our value. Our Petroleum and Power industries have the one of the best facilities of global standards, the mutual cooperation between ISA & Industry is helping them to keep pace with development as they happen.

It is a good opportunity for the automation professionals to attend this conference and enhance their knowledge & expertise. ISA provides platform to all the stake holders for mutual value addition.

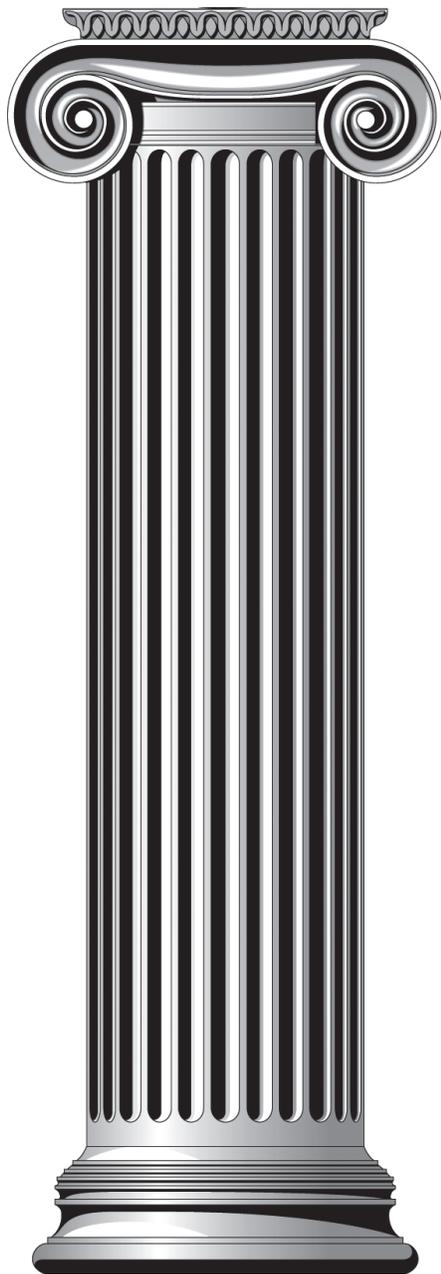
I feel privileged for being a part of the ISA team hosting this mega event. I expect all the fellow members of ISA Delhi and participants would feel the same. Let us come together and make this event a success.

Best Regards,  
Sanjay Raizada  
Convener – PPAM 2019





**ISA Delhi Section**



## **The International Society of Automation (ISA)**

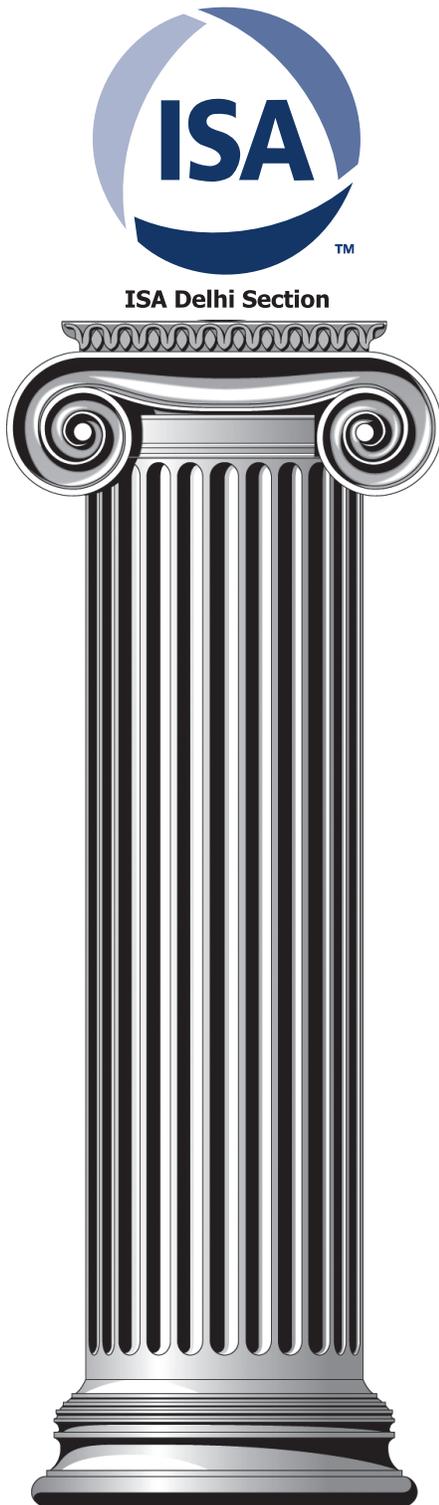
Founded in 1945, the International Society of Automation (ISA) is a leading, global, nonprofit organization that is setting the standard for automation by helping over 30,000 worldwide members and other professionals to meet, interact and share their knowledge. Based in Research Triangle Park, North Carolina, ISA is organized into 14 districts and hundreds of sections across the world. The South East Asia region is designated as District-14 and within this district, the Delhi Section is an active organization drawing members from the entire spectrum of automation industry across Power, Oil & Gas, Metallurgy, Chemicals & Fertilizers including the Engineering fraternity from Consultants, EPC Contractors, Automation Component Suppliers & Equipment Manufacturers, System Integrators and many other industries.

### **ISA has been involved in promoting emerging technologies across the globe by a variety of ways such as:**

- Developing and updating standards for existing & evolving technologies in automation related fields ;
- Publication of Text-books, hand-books, journals, proceedings etc. on a wide array of automation related subjects from primary field sensors to integrated automation and management systems for various kinds of plants & processes;
- Facilitating Interface & interaction with other agencies like IEC, IEEE, EPRI, ASME and others to develop and maintain automation related standards with regular updating, keeping pace with the march of technology in various fields;
- Organising Training, Seminars/Workshops, Webinars and Exhibitions
- Carrying out certification programs for technicians, engineers and senior professionals.
- Recognizing the talented and the dedicated professionals in the field of Automation through various honours and awards
- Enabling Interaction with Student members, formation of student section and annual scholarships, competitions etc. are many interesting student programs of the ISA.

### **The ISA Delhi Section - ISA(D)**

ISA Delhi Section had been formed almost a decade back and has progressed well since then with a membership of more than 350 and growing. ISA Delhi Section had taken many initiatives in the past including organizing two exhibitions ISA (D) EXPO' 05 & '07, PNID' 11,12 & 13, POWAT' 09,10,12 &13, PPAM'15,16,17 & 18 a large number of seminars and workshops on emerging technologies. Regular Monthly technical exchanges on diverse topics are organised for the benefit of all members of ISA(D), thereby increasing the knowledgebase & technical capabilities



of members.

ISA Delhi Section has taken quite a few initiatives in the recent past to better address the need for knowledge sharing among industry specific groups of Automation Engineers. Notably, within the overall ambit of ISA(D), two industry specific interest groups have already been created, one for the Power Industry namely Power Automation Technology group( or POWAT) and one for the Oil & Gas Industry called Petroleum & Natural Gas Industries Automation Domain( PNID). ISA (D) is also encouraging the formation of a systems integrators forum, so as to share the vast scattered knowledge base resources of systems intergrators community.

## **ISA Standards**

### **Practical Solutions from Industry Experts**

ISA Standards help automation professionals streamline processes and improve industry safety, efficiency, and profitability. Over 150 standards reflect the expertise from over 4,000 industry experts around the world. Since 1949, ISA has been recognized as the expert source for automation and control systems consensus industry standards.

### **Key Features, Advantages, and Benefits of Standards**

Realize a direct return on investment by

- Lowering installation and start-up costs
- Reducing need to maintain large inventories
- Enabling interchangeability of components
- Improving design with less “custom” effort
- Increasing safety

### **Use of standards in industry**

- Improves communication
- Provides practical application of expert knowledge
- Represents years of experience and avoids necessity of starting each project from ground up

### **Standards help you achieve operational excellence by**

- Improving performance
- Lowering maintenance costs
- Reducing downtime
- Enhancing operability
- Saving money



## ISA's Role in Developing Standards

More than 4,000 individuals cooperating with more than 140 committees, subcommittees, working groups and task forces are involved in ISA standards. They're developing standards in areas as diverse as ensuring the safety of electrical equipment used in hazardous locations to cost-savings for interfaces between industrial process control computers and subsystems.

### How a Standard Saves Money

ISA's batch control standard illustrates how using a standard cuts costs. Food, pharmaceutical and specialty chemical companies build factories with increasingly sophisticated computer-driven automation. The batch standard ISA developed-ANSI/ISA-88.00.01 - shaves as much as 30 percent off the cost of designing the system and software used in these plants. ANSI/ISA-88.00.01 sets out a blueprint that engineers can use to make portions of the code interchangeable, which is less expensive than designing each piece from the ground up.

The savings extend beyond the facility's design, though. By using the batch standard, companies save as much as 10 to 15 percent off the typical cost of meeting Food and Drug Administration criteria for the reliability of automation equipment.

### How a Standard Saves Lives

Other ISA standards focus on safety. ISA has developed standards for the performance requirements of toxic gas detectors, standards to keep electrical equipment from igniting flammable material and standards to ensure safety at nuclear power plants.

And some ISA standards can help an entire industry combine cost savings and safety. The most popular ISA standard is ANSI/ISA-5.1, Instrumentation Symbols and Identification. Developed in 1949 and most recently revised in 2009, these symbols are used in blueprints for everything from power plants to factories. If every contractor on a project knows the standard symbols, there are fewer communication problems that could lead to costly delays or safety problems.

### Using Standards to Help Your Business Expand Globally

Your company has a product that's taken the United States by storm; now you want to expand globally. But there is a hitch or, as the engineers might tell you, a "technical barrier to trade." Your company's product, or the process by which it's made, doesn't meet international standards. Many ISA standards are also international standards, and our committees strive to stay current with evolving global standards. ISA administers three committees for the International Electro technical Commission (IEC), which is one of the two most widely

recognized international standards groups, along with International Organization for Standardization (ISO).

### **How Your Company Can Take Advantage of ISA's Standards**

- Buy ISA standards and train your employees to follow it.
- Help set a standard. ISA's committees are eager for help. Both voting and non-voting memberships are available. Voting members must have their employers' approval, in part because attending at least one meeting a year is expected. But we're cutting down on the time demands of committee membership by encouraging members to do a great deal of their work via e-mail. Non-voting members supply input but are not required to attend meetings. Apply online to volunteer.

### **Students**

Students can come to automation from a variety of backgrounds and academic programs. It is sometimes difficult for you to find programs that concentrate on automation as a career or specialty. This potential variety can create challenges for students like you that are not seen in many areas of studies.

The essence of automation is that it is a multidisciplinary art, not a single discipline. You are required to know a lot about many things to function as an automation professional. Automation studies are rarely centred in one department. Automation students and faculty on a campus could come from any number of engineering areas. That means that published findings could appear in a number of journals and presented at a myriad of scientific conventions. This diversification makes it extremely difficult for students to stay current on the newest findings. It also means that you need to have a very open outlook on what will make you a good automation professional.

The ISA web site helps students more easily stay current on research without attending numerous expensive conventions or wading through non-automation related literature for the useful gems. Also, students can find the conferences they should attend to both gain information and networking possibilities, which can lead to job possibilities.

The ISA web site contains the Automation Body of Knowledge, from the very basics of sensors and controls to the most detailed industrial networking, enterprise integration, cyber security and safety information. When you have digested that Body of Knowledge, you will be ready to be a Certified Automation Professional, and you can find the tutorials and test materials here to help you.

### **The ISA Mentor Program for Young Professionals and Students**

ISA's Mentor Program enables young professional ISA Members and



Student Members to access the wisdom and expertise of seasoned ISA Members, while it offers veteran ISA professionals the chance to share their wisdom and make a difference in someone's career. A mentor can give a young professional guidance in his or her career or help a student determine if automation and control is the right path to follow.

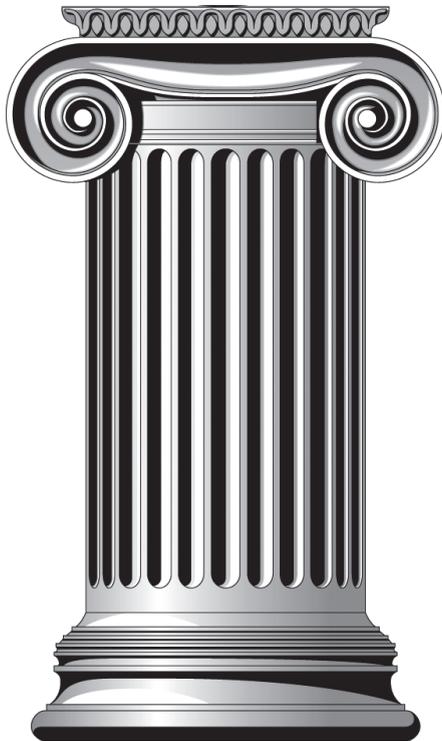
ISA's Mentor Program is an online program, so there are no meetings to attend and there is no travel. ISA Members from all over the world can participate, and the relationship can develop and progress at the convenience of the mentor and protégé.

ISA Members are encouraged to register and participate in the program as mentors. Find out more about becoming a mentor.

ISA's younger Members and Student Members are urged to use this valuable Member benefit. Find out more about getting an ISA Mentor and how to select a mentor.



**ISA Delhi Section**



## 2018-2019 ISA Section Leaders

**Name of Section: ISA DELHI SECTION**

**District#: 14**

<b>Position</b>	<b>Name</b>	<b>Mem. #</b>	<b>E-mail Address</b>
President (3130)	M K Srivastava	32247965	mksrivastava01@ntpc.co.in
President-elect (3150)	R Priyamvada	32191437	r.priyamvada@yahoo.com
Vice President (3390)	Sushil Kumar	33708948	sushil@gail.co.in
Secretary (3250)	Sachin Joshi	33282834	sachin.joshi@eil.co.in
Treasurer (3350)	Sandeep Gupta	32899578	totalsolutionsco@yahoo.co.in
Delegate (1370)	Ashish Manchanda	33042943	ashishcontact@yahoo.co.in
Alt. Delegate (0030)	Parag Tyagi	33129449	paraag@wissenautomation.com
Program Chair (0950)	Manish Kumar	33080951	manish.kumar@eil.co.in
Education Chair (1350)	Anil Chaudhary	32247401	anil@noclesys.com
Membership Chair (0790)	Amit Kumar Singh	33694514	amitsingh01@ntpc.co.in
Newsletter Editor (2970)	G. Ravi Teja	33159721	giddiraviteja@ntpc.co.in
WebMaster (3420)	Radheyshyam Tiwari	33146408	radheytiwari@gmail.com
Exhibit Chair (0430)	S Mahesh Kumar	32978456	s.mahesh.kumar@eil.co.in
Marketing Chair (1010)	Gaurav Jain	33614367	jaing@indianoil.in
Publications Chair (0970)	Raja Sekhar Gudipaty	32240787	rs.gudipaty@gmail.com
Honors & Awards (0510)	Aman Sagar	32970471	aman_sagar44@yahoo.com
Historian (1990)	Sarvesh Kumar Sharma	33703543	sarvesh.sharma@eil.co.in
Student Section Liaison (2870)	Prateek Singh	32930449	singhp2@indianoil.in
Student Section Liaison (2870)	Anuja Thukral	33173214	anuja.thukral@gmail.com
Section-Division Liaison (2850)	Ravinder Goyal	32180883	rgoyal@eipenviroindia.com
Standards & Practices (1150)	Sumit Kumar Halder	33636830	sumitkumarhalder@ntpc.co.in
Past Section President (3090)	S K Dhawan	33187323	sk.dhawan51@yahoo.co.in
Other (2950) Sr. Advisor	Rohit Bhardwaj	33026902	rohit_iocl@yahoo.co.in
Other (2950) Sr. Advisor	Alok Shrivastva	32247966	alokshrivastava@ntpc.co.in
Other (2950) Sr. Advisor	Prasenjit Pal	32156518	prasenjit@ntpc.co.in
Other (2950) Sr. Advisor	S K Bardhan	32930445	bardhansk@yahoo.co.in
Other (2950) Sr. Advisor	Dharmendra Singhal	33047333	dhsi@topsoe.in
Other (2950) Sr. Advisor	Atish Chakraborty	32899583	atish400@gmail.com
Other (2950) Sr. Advisor	Rajiv Gupta	32972094	rajiv.gupta@eil.co.in
Other (2950) Sr. Advisor	Ashis Dev	33719291	ashisdev@ntpc.co.in
Other (2950) Sr. Advisor	R Sarangapani	32986108	rsarangapani@ntpc.co.in
Other (2950) Sr. Advisor	Sanjay Raijada	33719289	raizadas@indianoil.in
Other (2950) Sr. Advisor	R K Bassi	32941231	rkbassi@yahoo.com
Other (2950) Sr. Advisor	S Sudershan Rao	33117790	ssrao46@gmail.com

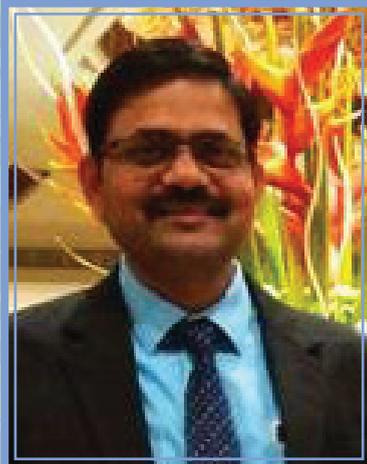
# Team ISA Delhi



**Sh. M K Srivastava**  
**Hon. President**



**Smt. R Priyamvada**  
**President Elect**



**Sh. Sushil Kumar**  
**Vice President**



**Sh. Sachin Joshi**  
**Hon. Secretary**



**Sh. Sandeep Gupta**  
**Treasurer**



**Sh. Ashish Manchanda**  
**Society Delegate**

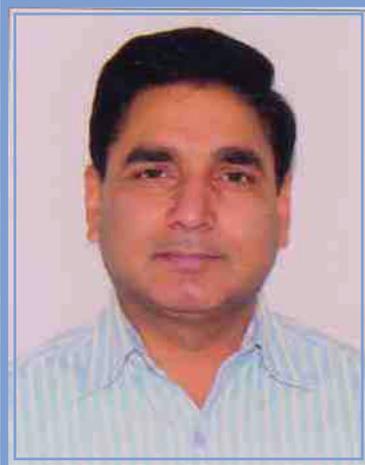
# Team ISA Delhi



**Sh. Parag Tyagi**  
Alt. Delegate



**Sh. Manish Kumar**  
Program Chair



**Sh. Anil Chaudhary**  
Education chair



**Sh. Amit Singh**  
Membership chair

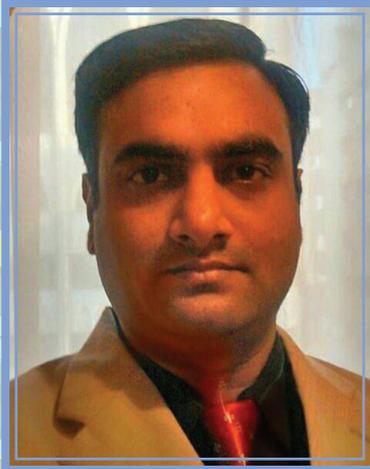


**Sh. G. Ravi Teja**  
Newsletter Editor

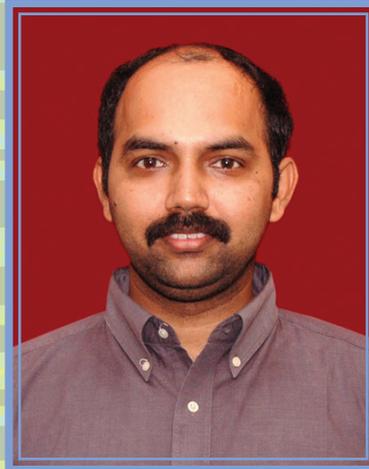


**Sh. Radheyshyam Tiwari**  
WebMaster

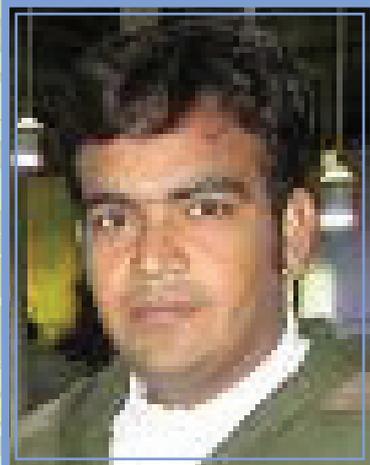
# Team ISA Delhi



**Sh. Sachin Agarwal**  
WebMaster



**Sh. S Mahesh Kumar**  
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**Sh. Sarvesh Kumar Sharma**  
Historian

# Team ISA Delhi



**Sh. Prateek Singh**  
Student Section Liaison



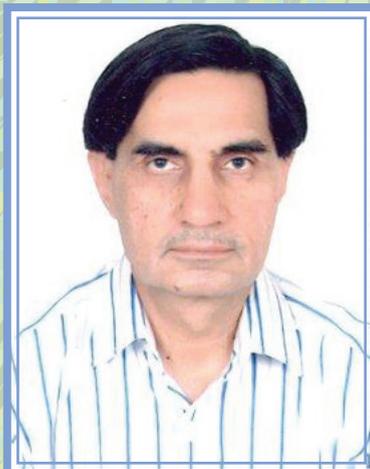
**Smt. Anuja Thukral**  
Student Section Liaison



**Sh. Ravinder Goyal**  
Section-Division Liaison



**Sh. Sumit Kumar Halder**  
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**Sh. S K Dhawan**  
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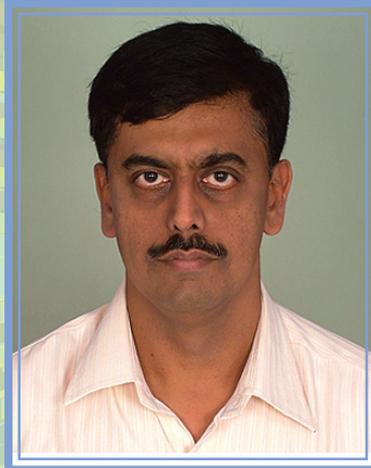
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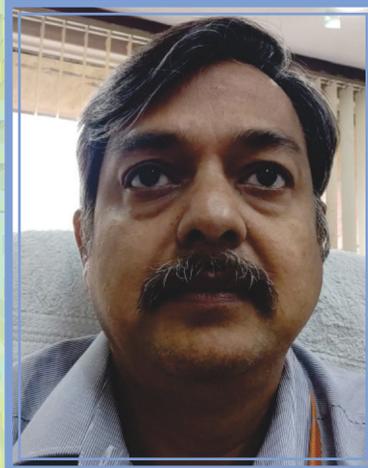
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