# Indian Society of Analytical Scientists-Delhi Chapter



Registration: HR-019-2019-02006

# Annual Report for the year 2019-2020

### **Registered Address**

Indian Oil Corporation Ltd, R&D Centre, Sector-13 Faridabad-121007, Haryana (India), Tel: 01292294366, 01292294334, 0129229735

# **Executive Committee of ISAS – Delhi Chapter (2018–2021)**

S. No	EC (Post)	Name	Organization
1	Chairman	Dr. G.S. Kapur	IOC R&D, Faridabad
2	Vice Chairman	Prof (Dr) A K. Sharma	DCRUST, Murthal
3	Vice Chairman	Dr. J.L. Sharma	KMC, DU, Delhi
4	Secretary	Dr. J. Christopher	IOC R&D, Faridabad
5	Jt. Secretary	Dr. M. S. Alam	Jamia Humdard, Delhi
6	Jt. Secretary	Dr. Rupesh Kumar	KMC, DU
7.	Treasurer	Dr. Ravindra Kumar	IOC R&D, Faridabad
8	Jt. Treasurer	Dr. Ram Singh	DTU, Delhi
9	EC member	Dr. A.S. Sarpal	OCS Lab, PNCC, Panipat
10	EC member	Dr. K.K. Gupta	Agarwal College, Ballabgarh
11	EC member	Dr. Devender Singh	MDU, Rohtak
12	EC member	Dr. Anju Chopra	IOC R&D, Faridabad
13	EC member	Dr. Raj K. Singh	IIP, Dehradun
14	EC member	Dr. Dheer Singh	IOC R&D, Faridabad
15	EC member-co- opt	Dr. Vishal Goel	IOC R&D, Faridabad
16	EC member-co- opt	Dr Raman Kumar Saini	GGDSG College, Palwal
17	Special –co-opt (CA)	Mr Sony Pal Saini	IOC R&D, Faridabad

# Financial Advisor and Internal Auditor : Mr. Sony Pal Saini

Auditor : Mr. Rajeev Jain, Sector-16, Faridabad

#### **About ISAS-Delhi Chapter**

ISAS - Delhi Chapter (www.isasdelhi.org) was established in 1992 to promote the growth of analytical sciences in the country. The headquarters of ISAS-Delhi Chapter is IndianOil R&D Centre, Faridabad, Haryana. ISAS-DC itself has more than 1481 life members from more than 90 various research institutes, national laboratories, universities, industry etc. The Chapter has organized more than 50 one / two / three - days technical Seminars / Symposia / Conference / Workshops on various contemporary topics of science at diverse locations. ISAS-Delhi Chapter has been adjudged as the Best Chapter by the parent body four times in the recent past. This Chapter also provides partial financial assistance to students to present research work in International conferences abroad. ISAS-DC is now an established scientific forum with sound financial and intellectual backing.

#### **Aim and Objectives**

- 1. To promote, encourage and develop the growth of Analytical sciences and their applications
- To establish an active association of all those persons, bodies, institutions (private or public) and industries interested in above (point 1)
- To disseminate information concerning the development in Analytical sciences and their applications through publications such as bulletins, reports, newsletters and journals.
- 4. To organize courses, symposia, seminars etc. in various parts of the country to educate the user of Analytical equipments and offer a proper platform for reporting and discussing new developments in various fields of Analytical sciences belonging to the present day Analytical chemistry
- 5. To initiate to make available analysed samples for educational institutions and industries.
- To render advice (technical or otherwise) to Government and commercial bodies o matters pertaining to Analytical techniques and applications when needed or requested

- 7. To secure grants, funds, endowments, and administer the same for the furtherance of the aims and objectives mentioned above
- 8. To acquire property such as office premises, auditorium etc
- To co-operate with the existing academics societies and institutes having similar objectives for the furtherance of Analytical sciences and their applications and with such other associations when found
- 10. To affiliate itself with suitable International organisations for the promotion of common objectives and to provide adequate representations of this country in International forums
- 11. To frame, construct, adopt, prepare, regulate or sanction rules, regulations, laws and bye-laws whereby the society may think fit to guide itself or whereto the society should conform or have recourses to carry out its objectives or otherwise, and from time-to-time vary, alter or confirm one or other of such rules, regulations, laws and bye-laws
- 12. To undertake and execute all other acts which shall promote the aims and objectives of the society.

In nutshell the society provides a common forum for Analytical Scientist to exchange ideas, keep themselves abreast of the latest developments in this field, thus promoting the growth of analytical science in country.

#### **Status of Life members**

Total life members of ISAS- DC as on 31 Dec 2019	1481
Life member added in 2019	61

# **Meetings**

### Meeting of the Executive Committee of ISAS-DC

Date	:	17 <sup>th</sup> August, 2019
Time	:	6.30 pm.
Venue	:	Indian Oil Corporation (Guest House)
		D-152, East of Kailash, New Delhi-110065

#### Agenda:

- Welcome by Chairman
- Status of Audit report and return filing
- New Registration of ISAS-DC in Haryana
- Change the name of ISAS-DC on PAN Card
- Current status of IAC- 2019
  Conference –Dr J. Christopher
  Exhibition- Mr Kamal Bhardwaj
- New website of ISAS-DC
- Vote of thanks by Secretary

### Meeting of EC members with FICCI - IAC-2019

Date	: 21 <sup>st</sup> June 21, 2019
Time	: 6 p.m
Venue	: 3 <sup>rd</sup> Floor Council Room, FICCI, New Delhi

### Agenda:

- Welcome address by Shri Praveen K Mittal, Director, Federation of Indian Chambers of Commerce and Industry
- Address by Dr. G.S. Kapur, Chairman, Indian Society of Analytical Scientists-DC (ISAS-DC)

- Presentation on the Event
  - Conference Part : Dr. J. Christopher, Secretary, ISAS-DC
  - Exhibition Part : Mr. Kamal Bhardwaj, Joint Director, FICCI
- Brief by EC members for their efforts to arrange International and Domestic Speakers for the following Focused Sectors:
  - Chemical & Petrochemicals
  - Drug & Pharmaceuticals,
  - Life Sciences & Natural Products
  - Food & Agricultural
  - Environment & Geology
- Suggestion for Inviting Eminent Scientists for the Event
- Suggestion by the members on the Conference / Technical Sessions
  / Exhibition
- Suggestion on the Delegates and Exhibitors Mobilization at the event
- Expectation from equipment suppliers
- Any other points
- Vote of Thanks by Dr. Ravinder Kumar, Treasurer, ISAS DC

### Meeting of the Executive Committee of ISAS-DC

Date	: 13 <sup>th</sup> Dec, 2019		
Time	: 6.00 p.m		
Venue	: Hotel Vibe Lalit, Faridabad		

## Agenda:

Chapter related issues with ISAS-HQ

# **Events (Seminar/ Conference/ Exhibitions)**

### National Symposium at Kirorimal College, Delhi University (KMC, DU, Delhi) on 7<sup>th</sup> Feb, 2019

Dr. G.S. Kapur ED (CT) and Chairman ISAS-Delhi Chapter inaugurated one day National Symposium on "Microbes and Nanotechnology for Sustainable Environment" jointly organized by Botany Department, Kirori Mal College (KMC), Delhi University, Delhi and Indian Society of Analytical Scientists (ISAS)- Delhi Chapter at Kirori Mal College, Delhi University on 7<sup>th</sup> Feb, 2019. A "Souvenir" was also released on this occasion. In his inaugural address, Dr. Kapur highlighted the importance of microbes and nanomaterials for sustainable environment and challenges before the society especially disposal of waste materials. He also mentioned various initiates by IOC R&D centre for the disposal of waste materials, technology developed by IOC R&D for the production of biogas from municipal sewage waste (MSW) and implementation of biogas from MSW technology across the country in the near future.



Earlier Principal, KMC, DU welcomed the participants and Dr. J. Christopher, GM (AD) and Secretary, ISAS-Delhi chapter briefed various activities of ISAS-Delhi chapter in the recent past to promote analytical science in the country. Dr. Samik Hait & Dr. Manoj Uperti from IOC R&D delivered lectures on "Nano interventions in Petroleum Industry" and "Biomethanation process for waste to energy" respectively in the symposium. The symposium was attended by more than 150 delegates and various topics related to Microbes and Nanotechnology were presented in the oral sessions. "Best paper awards" were presented to students to motivate young researchers during valedictory session.

### Indian Analytical Congress (IAC-2019), an International Analytical Conference & Exhibition at Amity University, Noida on 12-14 Dec, 2019

Indian Analytical Congress (IAC-2019), an International Analytical Conference and Exhibition was concluded successfully at Amity University, Noida from 12-14 December 2019 on the theme "Explore, Experiment and Experience the Innovation and Current Trends of Analytical Sciences". The IAC-2019 was coorganized by Indian Society of Analytical Scientists-Delhi chapter and Federation of Indian Chambers of Commerce and Industry (FICCI), sponsored by Indian Oil, LIST, Progression, LexmarGlobal, XOS, ACD/labs, Honeywell, Wipro, CSIR-IIP, Agilent, Polymer Char, Laurus infosystem. IAC-2019 International Conference acted as a forum to bring together researchers, scientists, instrument manufacturers and industry professionals to discuss innovative ideas and diverse topics on current and next generation of analytical sciences. The event brought together some 450 analytical scientists, research scholars, students and analytical equipment manufacturers, from almost 19 countries to discuss role of analytical science in different industries like pharmaceutical, natural products, petrochemical and polymer, environment and forest. More than 200 scientific papers were presented besides 38 Invited lectures delivered by eminent speakers from countries like USA, Canada, China, Japan, Germany, South Africa, Singapore, Brazil, Italy, Malaysia, India. The conference began with inaugural session wherein **Prof. Seyed Ehtesham Hasnain**, Vice Chancellor, Jamia Hamdard, Delhi delivered the inaugural and keynote address on Tuberculosis diagnosis and new interventions using drug repurposing. Earlier Dr G.S. Kapur, Chairman, ISAS-DC welcomed the delegates and briefed the audience with recent activities of ISAS Delhi Chapter. Mr. Prateep Mittal, Director, FICCI addressed the gathering with details of the conference events. Mr. P.P. Chandrachoodan, President, ISAS-HQ emphasized significance of analytical techniques in the area of research and industry. Following interested lectures/sessions held during conference.



**Prof. J. Seigel** from Tianjin University, China delivered a lecture entitled "Chirality in Aromatic Bowls: Structure, Configuration and Chiroptics". He mainly focused on modern methods that have led to the synthesis and characterization of bowl-shaped PAHs with a broad portfolio of photophysical and electrochemical properties. The chiroprical properties of these materials opens avenues for the development of new analytic and catalytic methods based on bowl-PAHs. Other speaker **Prof. Shuchi Agarwal** from Agri-Essesnce (Singapore) Pvt. Ltd, Singapore delivered a lecture entitled "Supercritical Fluid Extraction of Essential Oils and Analysis by Gas Chromatography". She discussed on the use of supercritical fluids extraction (SFE), especially with carbon dioxide, for the extraction of essential oils from plant materials for sample preparation prior to the analysis of compounds and analysis of these extracted compounds with gas chromatography techniques. **Dr. Vineet Kumar** from

Forest Research Institute, Dehradun delivered a lecture entitled "Natural Products Analysis: Case Studies using Diverse Analytical Techniques". He discussed on recent advancements in diverse analytical techniques including chromatographic and spectroscopic advancements for analysis of natural products. Dr. Kazuteru **Kawauchi** from JEOL, Ltd, Japan delivered a lecture entitled "Application of material analysis with soft X-ray emission spectrometer". He focused on how an electronbeam induced X-ray emission analysis is widely used for phase identifications and/or elemental analysis of materials as wavelength-dispersive X-ray spectroscopy (WDS) and energy-dispersive X-ray spectroscopy (EDS). Dr. Toshiya Uozumi from Toho Titanium Co., Ltd, Japan delivered a lecture entitled "Characterization of Ziegler-Natta Catalyst with the Latest Analysis Technologies". He presented research results on characterization of Ziegler-Natta catalyst using the latest analysis technologies such as Solid-State NMR and Soft X-Ray Spectroscopy. Prof. M.S. Alam from Jamia Hamdard, Delhi delivered a lecture entitled "Analytical Techniques for Natural Products Research - An Area of Critical Importance in Drug Discovery". He mainly focused on importance of various analytical methods in the overall drug development process from preclinical studies to drug formulation. Dr. Jose H. Santos from University Brunei Darussalam, Brunei delivered a lecture entitled "The Use of Electroanalytical Techniques for Rapid Screening of Antioxidant Capacities in Foods and Beverages". He discussed on how to determine antioxidant capacities of mungbean (Vigna radiata) sprouts and common beverages such as tea, coffee, herbal infusions and fruit juices consumed in Brunei Darussalam using electroanalytical techniques. Dr. Anil Mane from Lubrizol India Pvt. Ltd, Mumbai delivered a lecture entitled "Protecting Combustion Engines from Acidic Corrosive Wear – The Challenges of Measuring Acid and Base in Modern Engine Lubricants". He described the shortcomings of the current standardized Total Base Number (TBN) and Total Acid Number (TAN) measurements, and proposed alternative analytical tools to understand an engine lubricant's ability to protect against corrosion.

**Dr. TPV Ranganadham** from UOP, A Honeywell Company, Gurugram delivered a lecture entitled "Advanced Characterization for Industrial Catalysis Applications". He described the key aspects of two fundamentally important processes: catalytic

reforming and hydroprocessing. Catalytic reforming is based on the properties of noble-metal Pt nanoparticles (NPs) on alumina. **Dr. Raghaw Saran** delivered a lecture entitled "Glimpses of Analytical Techniques in Trace Elements Analysis". He described how Trace element analysis plays a prominent role in various fields viz. mineralogical, geological, medical to biological science, in living organisms, in various materials of commerce from semi conductors to food, environmental samples etc. **Dr. Daisy Joseph** from BARC, Mumbai delivered a lecture entitled "X-ray Emission Techniques in Analytical Sciences". She described the X-ray Emission Techniques of probes such as photons as in XRF (X-ray Fluorescence), protons as in PIXE (Proton Induced X-ray Emission) and synchrotron as in XANES, EXAFS.

#### Pharmaceutical Industry

The pharmaceutical industry is a part of healthcare sector that deals with medications. This industry comprises of different subfields pertaining to the development, production, and marketing of medications. Dr. Jochen Junker from Centre for Technological Development in Health, Rio de Janeiro-RJ, Brazil delivered a lecture entitled "Establishing NMR as Alternative Method for Pharmaceutical Quality Control". He described the importance of quality control demand in pharmaceutical analysis. In some cases, the Pharmacopeia method takes 2 days until delivering the result, making it difficult to keep up with the increasing demand. To overcome this, he discussed a set of NMR methods for qualification and quantification of pharmaceutical preparations have been developed. Dr. Joachim Wegener from University of Regensburg, Germany delivered a lecture entitled "Profiling the pharmacology of G-Protein coupled receptors using label-free physical sensors". He described several different approaches how non-invasive impedance measurements are used to characterize the pharmacology of GPCRs in cell-based assays comprising agonist assays, antagonist assays, dose-response relationships, receptor desensitization, signal transduction profiling and the

bioavailability of drug candidates. **Dr. Ravi Sankar Ampapathi** of Central Drug Research Institute, Lucknow delivered a lecture entitled "Structural Investigations of SIX3-HD and its role in the Disease Holoprosencephaly". He described the solution structure determination of SIX3 and its mutants as reported in patients with Holoprosencephaly and the structural variations associated with the mutations. **Dr.** 

**Mohan Prasad** from Sun pharmaceutical Industries Ltd., Research & Development Centre, Gurugram delivered a lecture entitled "Process Development and Scale-up from Generics Perspective". He focused on the generic drug development, stages of process development & scale up and generic approval requirements.

#### NMR spectroscopy as a Research and Quality Control Tool

There were quite a few numbers of talks about the applications of NMR, both low field time domain (TD) and high field frequency domain during the conference. **Dr. Natarajan Hari** from SASTRA Deemed University, Thanjavur, talked about the importance of relaxation measurement using low field NMR. In this context he gave a clear glimpse of Fast Field Cycling (FFC) NMR relaxometry and its applications in MRI contrast agents, oil-bearing rocks and catalysts, electrolytes, proteins, batteries, foodstuff and plastic/polymers and also biomarker for tumours etc. **Prof. Roberta Cipullo** from the University of Naples, Italy, talked about the use of high-temperature cryoprobes in achieving excellent S/N ratio in <sup>13</sup>C NMR and its unprecedented application in determining microstructure of polyolefin. 100-fold reduction of experiment time for a desired S/N value and thus application in high throughput experimentation has been key take away from her talk.

**Dr. Olaf Kohlmann** from LexMar Global, USA and **Dr. G. S. Kapur** from Indian Oil both talked about the application of time domain (TD) NMR, both online and offline applications, in determining several properties of polyolefin and thus avoid tedious time consuming processes of estimation. Real time property prediction and structure-property relationship has been the main motto of their talks. Dr. G S. Kapur also highlighted the fact that how NMR, both low field TD and high field NMR is being utilized in IOCL R&D Centre for various research and routine activities.

#### **Digitization/Digitalization:**

Digitization/Digitalization plays crucial role in data processing, storage and transmission especially in the research & development organizations. Data compilation and communication in a prompt way based on a unique platform is essential for the successful execution of research activities in science & technology. A special session of IAC 2019 was exclusively dedicated to the theme, **Impact of Digitalization on R&D and Industry**. A talk entitled "Enabling Digital Transformation and Enhanced Collaboration with Live Analytical Knowledge Management" was

presented by Dr. S. K. Bhal from Advanced Chemistry Development, Inc. (ACD/labs) Canada. Dr. Bhal gave a detailed illustration about the Spectrums Platform which enables digital transformation, standardization, integration, and aggregation of analytical data and knowledge in multi techniques. She also emphasized that Spectrus assembles live analytical data helping R&D organizations streamline data access, improve data integrity, and reduce the risk of manual processes. Dr. Tushar Gadkari from BASF Chemicals India Pvt. Ltd., Mumbai presented "High Throughput Approach for Analysis, Purification and Characterisation of small molecules" and explained the role of digitalization for the successful execution of research activity based on the four pillars Time, Money, Planning and Quality in an industrial environment. Mr. Navin kumar from Larus Infosystems (India) Pvt Ltd, India and Mr. Dhileep Krishnamurthy, Senior Pharmaceutical Expert, China shared their valuable comments with relevant presentations regarding the Impact of Digitalization. The session was concluded by Mr. K.K. Baghchandani, Freelancer, India with the presentation entitled "Artificial Intelligence; What does it mean, Do I need to be concerned?". He gave a detailed overview about the advancement of digitalization leading to the era of artificial intelligence (AI) and its applications' in our day to day life. The very session witnessed an open debate forum, where the audience, eminent scientists and industrialists shared their knowledge and information related to the digitalization for the improvement of Research & Development activities in various organizations.

#### Nanoscience and Nanotechnology:

Nanotechnology is an inevitable area of research and IAC-2019 explored the possibility of various instrumentation techniques for research & development in this area with few presentations from eminent speakers. **Prof. S.K. Chakravarti**, Former Professor, Department of Physics, NIT, Kurukshetra, **Prof. Ashok K. Sharma**, Thin film laboratory, Department of Materials Science & Nanotechnology, Deenbandhu Chhotu Ram University of Science & Technology, **Dr. Parveen Saini**, Principal Scientist, CSIR-NPL, New Delhi, **Dr. S.K. Mehta**, Department of Chemistry, Punjab University and others presented their respective developmental research related to nanoscience. The multi-dimensional applications of nanomaterials were explained in detail throughout the presentations ranging from cutting edge research in

nanotechnology to applications in daily life. But the major focus of the presentations was on exploring the possibilities of various characterizations tools for understanding the Nanomaterials especially by using advanced electron microscopic techniques like TEM (transmission electron microscopy) & SEM (scanning electron microscopy).

#### **Biological and Environmental:**

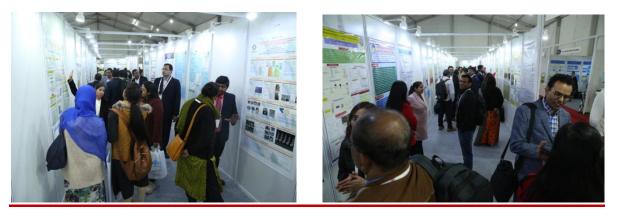
Invited lectures from scientists during IAC-2019 presented the prime role of analytical and characterization tools for versatile applications including biological and environmental research. Prof. S B Mishra and Prof. A K Mishra from University of South Africa explained the new opportunities in material development for environmental and material applications providing sustainable solutions for industrial waste remediation, waste water remediation and environmental sustainability. Prof. **Ekramul Mahmud** from Department of Chemistry, University of Malaya talked about the polymer-based adsorbents for adsorbing heavy metal ions from wastewater. Dr. **P.K. Bharti** from Antarctica Laboratory, R&D Division, Shriram Institute for Industrial Research dealt with a diverse area "Role of physical, chemical and biological analysis in Antarctica" and presented the importance of environmental study in Antarctica. Retd Prof. Ishwar Singh, M.D. University, Rohtak gave a brief description about the topic "SELENIUM: An Element that Requires Serious Attention" and discussed the vital role of highly toxic element selenium in our life from a biological point of view. Dr. Raj K. Singh from CSIR-Indian Institute of Petroleum presented an overview of "Environmentally benign multifunctional lubricant additives from organic transformations of renewable feedstocks". Later Prof. G.S. Sodhi, S.G.T.B. Khalsa College, Delhi, India delivered an interested talked about "Significance of Analytical Reagents for Combating Crime" and Dr. Rajeev Raghavan from VSSC, Thiruvananthapuram, India presented the Application of Analytical Chemistry in the development of Solid propulsion Systems for Space Technology.

### **Poster Session:**

In the poster session of the Indian Analytical Congress-2019, a total 102 number of posters representing a diverse field of analytical chemistry research were presented by various presenters, mostly students and young researchers. As one of the most interactive sessions of the three day conference, the poster session was extremely successful. Panel of jury evaluated all the posters and interacted with the authors. Based on jury recommendations, 10 best poster out of the displayed 102 posters were selected for best poster awards. The winners were presented with a certificate of appreciation and a cash award.



The best poster awardees were **Ms. Babita Veer** from Delhi Technological University, Delhi, **Ms. Nisha** from CSIR-Indian Institute of Petroleum, Dehradun, **Ms. Mansi Vaid** from Guru Gobind Singh Indraprastha University, New Delhi, **Mr. Arun K. Sikder** from SABIC Technology Centre, Bengaluru, **Ms. Vishakha Chaudhary** from University of Delhi, Delhi, **Mrs. Priyanka Verma** from Doon University, Dehradun, **Dr. A. B. Vysakh** from Indian Oil R&D Centre, Faridabad, **Dr. Aman Bhardwaj** from Jawaharlal Nehru University, Delhi, **Dr. Subhash C. Bajia** from IOCL, Mathura Refinery **and Ms. Vartika Gupta** from Graphic Era University, Dehradun.



### **Exhibition Highlights:**

Another feature of the IAC-2019 was an Exhibition, where industries form India and abroad set up stalls to exhibits their Latest Technologies in the Field of Analytical Science. Industry leaders Like Agilent Technologies, Advent Chembio Pvt. Ltd, Borosil Glass Works Limited, Breath Easy, Spectron, Chemtron Science Laboratory Pvt. Ltd, Cryogen, Elementar India Pvt. Ltd, Inkarp Instruments Pvt. Ltd, I R Technology Services Pvt. Ltd, Mars Bioanalytical, Skytech Systems Pvt. Ltd, ACS/Lab, Canada etc had displayed their products and services among the business clientele provided by the show.

This conference provided an opportunity to learn the latest developments in analytical equipments in the area of Pharmaceutical, Natural products, Petroleum, Petrochemical and Polymer, Environment and Forest. Further digital transformation, standardization, integration, and aggregation of analytical data and knowledge of multi techniques seems very important for any Industry. 3 Best Exhibitors were awarded with mementoes.



# Audit report for 2019-20

#### **INDIAN SOCIETY OF ANALYTICAL SCIENTISTS (REGD)**

DELHI CHAPTER

C/O Indian Oil Corporation, R & D Centre, Faridabad

#### STATEMENT OF AFFAIRS AS ON 31.3.2020

LIABILITIES	AMOUNT (Rs)	ASSESTS		AMOUNT (Rs)
Balance as on 31.3.2019	1999759.75	Fixed Deposit	1013147.00	
		Add: Accrued Interest	59845.00	1072992.00
Add Excess of Income over Expenditure	333374.58			10/2002100
		Current Assets		
	2333134.33			
Less: Income Tax Paid	42650.00	Cash & Bank Balances		
Less: TDS	41653.00	Syndicate Bank		566063.33
	2248831.33			
		State Bank of India-IOC		609776.00
		Cash in Hand		0.00
Total	2248831.33	Total		2248831.33

Ravindra (TREASURER)

J. A (SECRETARY)

Prepared as per Books of Account produced before me

114 ari G Place : Faridabad Date : 09.07.2020

CA. RAJEEV JAIN Membership No. 089449

#### INDIAN SOCIETY OF ANALYTICAL SCIENTISTS (REGD)

DELHI CHAPTER

C/O Indian Oil Corporation, R & D Centre, Faridabad

#### **INCOME & EXPENDITURE A/C FOR THE YEAR ENDED ON 31.3.2020**

EXPENDITURE	AMOUNT (Rs)	INCOME	AMOUNT (Rs)
Audit Fees	23600.00	Life Membership fees	91500.00
Legal & Professional Expenses	17870.00	Conference Registration Fees	270000.00
IAC-2019 Spends	688924.00	Conference Sponsorship	649410.00
Bank Charges	627.00	Bank Interest	33352.55
ISAS Executive Meeting Expenses	43520.00	Interest on FD	66498.00
Printing & Stationery	2845.00		
Surplus	333374.55		
Total	777386.00	Total	1110760.55

(TREASURER)



Place : Faridabad Date : 09.07.2020

5.0 (SECRETARY)

Prepared as per Books of Account produced before me

CA. RAJEEV JAIN Membership No. 089449

#### INDIAN SOCIETY OF ANALYTICAL SCIENTISTS (REGD) DELHI CHAPTER C/O Indian Oil Corporation, R & D Centre, Faridabad

#### BANK RECONCILIATION STATEMENT AS ON 31.3.2020

DETAILS	AMOUNT (RS.)
(State Bank of India) Balance as per Bank Pass Book as on 31.3.2020	609776.00
Balance as per Our Book as on 31.3.2020	609776.00
(Syndicate Bank)	566063.33
Balance as per Bank Pass Book as on 31.3.2020 Balance as per Our Book as on 31.3.2020	566063.33

(TREASURER)

3 (SECRETARY)

Place : Faridabad

Place : Faridabad Date : 09.07.2020

Prepared as per Books of Account produced before me

CA. RAJEEV JAIN