INDIAN ASSOCIATION FOR AIR POLLUTION CONTROL

The Indian Association for Air Pollution Control (IAAPC) was formed in Banaras Hindu University on 18th September 1976 by Prof Chandra Prakash (President), Deptt. of Chemical Engineering BHU, Prof G.D. Agrawal (Vice President), IIT Kanpur and Prof Dr. Rao (Joint Vice President), Deptt. of Botany, BHU and Mr. Surendra Kumar (GeneralSecretary), BHU during a conference.

The activities of IAAPC were shifted to Delhi in 1980- 1981, after Prof. G. D. Agrawal became the Member Secretary of Central Pollution Control Board (CPCB). IAAPC was formally registered in Delhi under the Societies Registration Act 1860 on the 3rd September 1985 vide Registration No. S/15993. The Registered address of IAAPC was c/o CPCB, 6th Floor, Skylark Building, 60, Nehru Place, New Delhi 110019.

Very little information is available about the functioning of IAAPC during the period 1976 to 1980. The Indian Journal of Air Pollution Control (IJAPC) was published by IAAPC in the year 1978, 1979 and 1980. One research paper published in IJAPC mentions the Volume 3 Issue 1, January 1980 (Copy attached). One full copy of Journal available with us mentions Volume 4 (corrected using rubber stamp) Issue 3, 1983, published from Skylark Building, 60, Nehru Place, New Delhi 110019. (Cover page of the Journal is attached, Full journal is also posted in the website).

The draft constitution of the IAAPC is available in IJAPC – 1983 (attached). The Office Bearers of name and address of Executive Committee for year 1983 is also attached. In Executive Committee - 1983 contemporary doyens of air pollution control in India were governing the affairs of IAAPC.

- 1. Prof J.M.Dave, School of Environmental Sciences JU (President)
- 2. Prof G.D.Agarwal, Member Secretary, Central Pollution Control Board, Delhi (National Vice President)
- 3. Prof D.N.Rao, Dept of Botany, BHU, Banaras (Vice President)
- 4. Dr. R.C.Trivedi, Advisor, Govt of Gujarat (Vice President)
- 5. Mr. Y.R.Pakkala, DGM RCF Chembur, Bombay (Vice President)
- 6. Mr. A.P.Roy, Chief Design Engineer, MECON, Ranchi (Vice President)
- 7. Prof H.B.Mathur, Dept of Mechanical Engg, IIT Delhi (Secretary General and Chief Editor)
- 8. Dr. B.Sengupta, Scientist, Central Pollution Control Board, Delhi (Secretary and Editor)
- 9. Prof D.K.Banerjee, School of Environmental Sciences JNU
- 10. Mr. V.S.More, Sr. Manager, Indian Oil Corporation Ltd. (Treasurer)
- 11. Prof C.K.Varshney, School of Environmental Sciences, JNU
- 12. Prof H V Bhavnani, Dept of Botany, MS University, Vadodara
- 13. Prof B.K.D Agarwal, BHU, Banaras

14. Dr. M.M.Lal, Scientist, Indian Toxicology Research Centre, Lucknow

15. Mr. M.L. Prabhakar, Member Secretary, Haryana Pollution Control Board, Chandigarh

The first annual convention of IAAPC was organized during Nov 23-25, 1983 at IIT Delhi (attached).

IAAPC became inactive after 1986, after Prof G D Agrawal left CPCB and Prof Nilay Choudhury retired for the services of CPCB.

Mr. Vishwas S More, then treasurer-IAAPC got transferred to IOCL-Vadodara in 1986 -1987. He initiated the activities of IAAPC at Dept of Botany, M S University, Vadodara, with the involvement of Prof S. J Bedi, Prof Arun Arya, Prof H V Bhavnani and few others. The activities of IAAPC remained confined to Baroda.

In year 2000, Prof. J. M. Dave, Prof G. D. Agarwal, Prof Dilip Biswas (then Chairman-CPCB), Dr. B. Sengupta, Dr. S. P. Singhal, Dr. M. M. Lal, Mr. S. K. Gupta, Dr H. K. Pawana, Dr Rajendra Prasad and Dr J. K. Moitra felt a strong need for the presence of such an Association at the National level. The activities of IAAPC were revived in Delhi, under the aegis of Indian Association of Air Pollution Control – Delhi Chapter. Prof. J.M. Dave was selected as the first President of IAAPCV-DC. Eminent names of luminaries who served as President of IAAPC-Delhi Chapter are Prof. J.M. Dave, Prof Dilip Biswas, Dr A. L. Agarwal, Prof C. K. Varshney, Er. Paritosh Tyagi and Dr. B. Sengupta. Dr G. D. Agrawal continued to be the Patron, Mentor &

Name of Post	Name of Occupant	Qualification	Affiliation
President	Dr. Jitendra Swarup Sharma	PhD Chemistry	Retd Group GM, ONGC
			Member EAC Industry-2 MOEFCC
Vice Presidents	Dr J P Gupta	PhD Engineering	Chairman EAC Industry-2 MOEFCC
	Prof Vijay Kumar Minocha	PhD Engineering	HOD, Civil Engg Dept, DTU
	Dr. Sanjeev Kumar Goyal	PhD Engineering	Head, ZO-Delhi CSIR NEERI
	Dr Randeep Singh Saini	PhD Engineering	Expert Consultant – Laboratory
			Quality Control & EIA Study
General	Dr. Shankar G. Aggarwal	PhD Chemistry	Professor (AcSIR) &
Secretary			Senior Principal Scientist, CSIR-NPL,
			New Delhi 110012
Treasurer	Dr. Rajendra Prasad	PhD Chemistry	Expert Consultant – Air Pollution
			Monitoring Instruments & EIA

The name of Executive Committee of IAAPC-Delhi Chapter for the year 2022-24 is given below:

Guiding Force of IAAPC – Delhi Chapter, till his demise in October 2018.

			Study	
Joint Secretary	Sh. Abhijit Pathak	M.Sc. Chemistry	Sr. Scientist, CPCB	
Executive	Dr H.K.Parwana	PhD Chemistry	Former Scientist, Punjab SPCB	
Committee			Expert – EIA Study	
Members	Dr. Mukesh Kumar Gupta	PhD Chemistry	Director, CPPRI – Saharanpur	
	Prof Bhola Ram Gurjar	PhD Engineering	Civil Engg Dept, IIT Roorkee	
	Prof Ranu Gadi	PhD Chemistry	Indira Gandhi Delhi Technical	
			University for Women, Delhi	
	Prof Ajay Taneja	PhD Chemistry	Bhim Rao University Agra	
	Dr. Marisha Sharma	PhD Engineering	Expert Consultant-EIA Study	
Editor-in-Chief	Dr. Padam B. Rastogi	PhD Toxicology	Former Advisor, MOEFCC	
Editors Dr. Sushil Kumar Tyagi		PhD Chemistry	Former Addl Director CPCB	
	Dr. Archana Yadav	PhD Botany	Former Scientist ONGC	

It is quite evident that CPCB played the key role in nurturing and sustaining IAAPC. Prof Nilay Choudhury, the first Chairman of CPCB once mentioned the symbiotic objectives of CPCB and IAAPC, that is strive for the prevention and control of air pollution in India. IAAPC is India's first Association of Expert Professionals who are working in the field air pollution measurement, assessment and control. Under the patronage of Prof Choudhury and Prof Agrawal, IAAPC collaborated with IIT-Delhi and few large PSUs and played a key role in formulation of National Ambient Air Quality Standards, Ambient air quality monitoring method, Stack emissions monitoring method, preparation of emission inventory and impact assessment, and air pollution control technologies like mechanical dust separators and ESP. After 1986 the activities of IAAPC became obscure. Again, in year 1999-2000, the air pollution problem in Delhi became severe due to exponential growth of diesel fired vehicles. There was a hue and cry by the public and media. Everybody favored CNG vehicles. The then Chairman of CPCB, Prof Dilip Biswas and then Member Secretary of CPCB, Dr B. Sengupta felt the urgency of an Association of Expert Professionals like IAAPC. The Expert professionals again joined under the aegis of IAAPC-Delhi Chapter and started working under the guidance of Prof Dilip Biswas and Dr B Sengupta. The work was recognized by Govt of India and Prof Dilip Biswas was conferred the third highest civilian honor, the Padma Shree. By the time Dr B. Sengupta left CPCB in 2008, IAAPC-Delhi Chapter grew both in membership and activities.

The Delhi Chapter had organized following Workshops. Seminars & Training courses:-

- (1) Fine Dust Management in Metropolis (2001)
- (2) Ambient Air Quality standards (2002)

(3)	Training course on Air Quality Modelling	(2003)
(4)	VOC – Fugitive emissions	(2003)
(5)	Urban Air Pollution Monitoring & Management	(2003)
(6)	Effectiveness of PUC to controlvehicular pollution	(2004)
(7)	Evaluation of Indian Experiences in Air Quality Monitoring & data interpretation	(2005)
(8)	Noise Pollution	(2006)
(9)	Air Pollution problems due to burning of Agricultural residues	(2006)
(10)	Utilization of Air Quality Data	(2007)
(11)	HAP's – Hazardous Air Pollutant	(2008)
(12)	Evolving strategies for improving Air quality of Indian cities	(2008)
(13)	Recent advances in the field of air quality management	(2008)
(14)	Air Pollution & Human Health	(2008)
(15)	Air Quality Criteria to identify Good Habitats	(2011)
(16)	Air & Noise pollution and its Effect on Human Health	(2013)
(17)	Indoor Air Quality	(2014)
(18)	Black Carbon/PM _{2.5} Measurement, ImpactAnd Control	(2014)
(19)	Delhi Air Quality- Issues and Options for Improvement	(2015)
(20)	Gaps & Challenges in Air Quality Study for Preparation of EIA Report	(2016)
(21)	Impact of Air Pollution on Monuments and Its Preservation	(2018)
(22)	Air Pollution & Health Linkage: Guidelines for Impact Assessment	(2019)
(23)	Short Term & Long Term Solutions for Restoring the Air Quality in Delhi & NCR	(2019)
(24)	Reminiscence of Late Prof Guru Das Agrawal, Founding Member IAAPC)	(2019)
(25)	Criterion for Air Quality Measurement Devices (with NPL)	(2020)
(26)	Discussion on Draft EIA Notification – March 2020	(2020)
(27)	Review of National Ambient Air Quality Standards -2009	(2020)

These events have made very useful contributions, in creating awareness and policy formulations for monitoring, control & management of air quality in India.

Annual Event

Central Pollution Control Board remained the main guiding force for IAAPC Delhi Chapter. IAAPC and CPCB jointly organizes an annual event on 23rd September every year, to commemorate the Foundation

Day of CPCB. Prof. Nilay Chaudhary Memorial Lecture is organized in memory of the first Chairman of CPCB. Following eminent persons have delivered the Prof. Nilay Chaudhary Memorial Lecture:-

- 1. Prof. J. M. Dave
- 2. Prof. S. J. Arceivala
- 3. Prof. Rashid Ahmed Siddiqi
- 4. Dr. K R Ranganathan
- 5. Shri. Rajinder Singh
- 6. Prof. Vinod Tare
- 7. Shri Paritosh Tyagi
- 8. Dr. Ragini Behn
- 9. Shri Subir Raha
- 10. Ms. Sunita Narain
- 11. Prof. A.K. Maitra
- 12. Prof. Amita Athavale
- 13. Smt. Menaka Gandhi
- 14. Justice Swatantra Kumar

Indian Journal for Air Pollution Control

IAAPC – Delhi Chapter took the initiative and revived publication of the Journal. The Journal is published twice a year. The eight digit International Standard Serial Number of the Journal (ISSN) is 0250 5231.

IAAPC – Delhi Chapter is a unique body of professionals in the field of air pollution measurement, control and management. It is playing a constructive role in the society. It has more than 600 eminent person enrolled as Life Member. The Life Members of IAAPC represents "Presence Across Nation (PAN INDIA)" from various subject background ranging from all branches of Engineering, Meteorology, Physical and Biological Sciences, Toxicology and Social Sciences. The membership of IAAPC – Delhi Chapter is open to all Institutions and individuals from all over the world, interested in contributing to the objectives of the Association. The membership form and other details are available in the website.

Aims & Objectives

- a) To promote an understanding of the air environment and of its pollution, its effects on human beings, animals, plants and materials and of the abatement and control of such pollution.
- b) To provide an active and effective forum for exchange of views and information about the air environment, and its conservation among its members, and help to educate the general public and create mass awareness for air pollution control.
- c) To promote objectivity, professionalism and fellow feelingsamongst various groups and individuals involved in air pollution Control.

To achieve the above objectives, the Association may undertake activities including the following:

- i. Publishing the "Indian Journal of Air Pollution Control" and such other publication as may be considered desirable;
- ii. Organizing meetings, seminars, symposia, excursions, etc at local regional and national and international levels;
- iii. Organizing training courses, conducting examination and awarding certificates and diplomas in various aspects on various aspects of air pollution and its control;
- iv. Instituting scholarships, prizes and honorary awards considered helpful in fulfillment of its objectives;
- v. Establishing and maintaining a library of literature about the air environment;
- vi. Establishing and maintaining liaison with international, national and other agencies (whether government or otherwise) in the interest of fulfillment of its objectives;
- vii. Developing and managing funds, endowments and properties of the Association for the promotion of its objectives;
- viii. Any other activities considered helpful in fulfillment of the objectives of the Association.

VISION AND MISSION

- 1. Disseminate useful knowledge regarding air pollution measurement, impact assessment, control and management to all stakeholders;
- 2. Skill development and strengthening the capability of environmental professionals working in the field of air pollution;
- 3. Provide a platform to environmental professionals working in the field of air pollution to share their views and address their grievances;
- 4. Encourage scientific research on air pollution measurements, impact assessment, and control through distribution of awards and citations, publication of research articles and research papers.
- 5. Participate in training programs, seminars, workshops and conferences for updating knowledge and latest developments in the field of air pollution;
- 6. Effectively communicate with regulatory authorities, tribunals, courts, research, academic and other institutions for the overall benefit of society.

CODE OF CONDUCT

- i. The dignity of IAAPC is sacrosanct. The Executive Committee (EC) members must respect the prestige and tradition of IAAPC and strive to maintain its dignity.
- ii. EC members must remain committed to the principles and philosophy of IAAPC.
- iii. EC members must refrain from using the IAAPC Logo and Name for Personal benefits/ as Promotion materials.
- iv. EC Members should not represent IAAPC in any conferences, workshops, seminars or any other forum without obtaining prior approval of President.

Combustion of Soft Coke on a Household Grate

K. Gadgil, A. Mandal and M. K. Sarkar

Centre for Energy Study, Dapartment of Chemical Engineering Indian Institute of Technology, New Delhi-110 016

An extended experimental study on combustion of soft coke in an Indian chulha (sigri) was made, with the purpose of investigating the principles of smoke generation during the initial lighting-up operation of such a household appliance. Three differnt bed heights of soft coke were used with standardized lighting-up conditions by using a fixed quantity of wood-chips as igniter fuel and a smokeless bunsen flame for lighting the wood-chips. Measurements were made for variation with time of smoke density and temperatures of three different zones of the fuel bed. Detailed gas analysis was done with Orsat apparatus and Gas Chromatorgraph. Relationship of smoke density with various parameters were established.

INTRODUCTION

In an earlier communication (Gadgil et al., 1979), the results of a study of combustion of solid fuels on a household grate, was reported. From the measurements of smoke density, exhaust gas analysis and two-zone temperatures of the fuel bed, some relationship between smoke density and volatile matter of the fuel - (mainly of the igniter fuel) being burnt during the lighting-up operation, was established. The study was continued to establish the earlier observations and to observe the effect of fuel bed heights along with other parameters. Results of this study are reported in the present communication.

EXPERIMENTAL DESIGN

The experimental chulha (sigri) (Gadgil et al., 1979) as used in the earlier study, was used here also. Three lighting-up operations were performed with 100, 200 and 400 gm of soft coke available in the local market in lumps of approximately 2.5 cm diameter. The coke-bed was placed on top of an igniter fuel bed made of 150 gm wood-chips. Lighting-up was done in each case with a bunsen burner.

Temperature profile of the fuel bed was measured by placing four calibrated chromel-alumel thermocouples at radia centres of four zones, that is one at the centre of the igniter fuel bed, and three others at the bottom, middle, and top of the coke bed. All the four thermocouples were connected to a multipoint recorder for continuous record of temperature.

Detailed analysis of the exhaust gas was done by collecting samples from the top of the fuel-bed through slow suction, and then determining the composition by an Orsat apparatus for CO_2 , O_2 , CO, and N_2 by difference, and by gas chromatography for saturated and unsaturated hydrocarbons. Hydrogen-carbon ratio of the fuel burnt at any particular time, was estimated by elemental balance of the gas analysis.

Smoke density was measured through an approximate light absorption •coefficient, estimated by reduction of intensity of an electric lamp when viewed by an optical pyrometer through a thickness of smoke. Principle of this measurement has been elaborated the earlier (Gadgil *et al.*, 1979).

RESULT AND DISCUSSION

Temperature at the centre of igniter fuel-bed was found to be almost the same as that at the bottom of the coke-bed. When the igniter fuel was burnt off, the coke bed dropped a little, and then only three temperatures of the coke-bed were recorded. Figures 1A, 1B, and 1C represent the temperature variation with time in the three coke-beds having different quantity of fuel, namely 100, 200, and 400 gm, respectively. From the graphs, it could be seen that among the three zones the temperature at the middle zone was the highest.

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Indian Association for Air Pollution Control

CONSTITUTION

(Draft for Inviting Comments and Suggestions)

Important Note: Kindly go through the Draft given^{*} below carefully and send your Comments/suggestions to the Secretary, Indian Association for Air Pollution Control, 6th Floor, Skylark, 60, Nehru Place, New Delhi-110019, so as to reach him by Oct. 15, 1983

I. Name and Headquarters

- The Association shall be called the "Indian Association for Air Pollution Control", hereinafter referred to as "the association".
- 2. The Association shall function as an All-India body with national headquarters located in Delhi Union Territory (currently at 6th Floor, Skylark, 60—Nehru Place, New Delhi-110019 on a temporary basis and to be shifted to such other premises as may be decided by the National Executive Committee) and with chapters in such cities and towns as may satisfy the conditions of Section 14 and may be formally constituted as chapters with the approval of the National Executive.

II. Aims, Objectives and Activities

- 3. The aims and objectives of the Association shall be:
 - (a) To promote an understanding of the Air environment and of its pollution, its' effects on human beings, animals, plants and materials and of the abatement and control of such pollution;
 - (b) To provide an active and effective forum for exchange of views and information about the air environment and its, conservation among its, members and help educate the general public and create mass awareness for air-pollution-control;
 - (c) To promote objectivity, professionalism and fellow feelings amongst various groups and individuals involved in Air Pollution Control.
- To achieve the above objectives, the Association may undertake activities including the following:

- Publishing the "Indian Journal of Air Pollution Control" and such other publications as may be considered desirable;
- (ii) Organising meetings, seminars, symposia, excursions etc. at local, regional, national and international levels;
- (iii) Organising training courses, conducting examinations and awarding certificates and diplomas in various aspects of air pollution and its control;
- (iv) Instituting scholarships, prizes and honorary awards considered helpful in fulfilment of its objectives;
- (v) Establishing and maintaining a library of literature about the air environment;
- (vi) Establishing and maintaining liaison with international, national and other agencies (whether government or otherwise) in the interest of fulfillment of its objectives;
- (vii) Developing and managing funds, endowments and properties of the Association for the promotion of its objectives;
- (viii) Any other activities considered helpful in fulfilment of the objectives of the Association.

III. Membership

5. Institutions and individuals from all over the world interested in contributing to the objectives of the Association, fulfilling the conditions given hereinunder, having been duly accepted and paid the fees as prescribed in the following sections, shall be eligible for membership of the association in the appropriate category out of the following:

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(ii) Fellow

: Life or Renewable

- (iii) Member Ordinary : Life or Renewable
- (iv) Student-Member : Renewable only
 - 6. Institutional Membership will be open to government departments and offices, industrial and business establishments, educational, research and other institutions as also to associations and societies who are concerned with, or are involved in, studies regarding or the implementation of, air-quality conservation. For this they will apply in the prescribed form and shall be admitted as Permanent or Renewable Institutional Member (PIM/RIM) by the National Executive Committee after due verification of their credentials and deposition of requisite fees. They will enjoy all privileges of an (Ordinary) Member and shall be entitled to nominate one person to all meetings, seminars, symposia etc. who will be treated at par with an (Ordinary) member for all purposes.
- 7. (Ordinary) Membership will be open to all individuals (i) holding a Bachelors Degree or its equivalent (recognised by Govt. of India) (a 3 year Diploma in engineering/medicine/public health after Higher Secondary shall also be acceptable for this purpose) and (ii) posessing reasonably demonstrated interest in the airenvironment and its conservation through involvement in research, education, professional practice, mass education etc. They will apply on prescribed forms with recommendation from Member/Fellow/Institutional an existing Member and pay the prescribed fees for Life or Renewable membership, and will be admitted (as LM/RM) after due scrutiny and clearance by either the appropriate Chapter Managing Committee or by the National Executive where no Chapter has so far been constituted.
- 8. Fellowhsip of the Association would be open to individuals with significant experience in and contribution to work related to air-qualitymanagement. Persons holding Post-graduate qualifications in Engineering/Medicine/Science having been active in work related to air-qualitymanagement over at least ten years and having significant contributions to the work of airquality- management to their credit may apply or be nominated by a Chapter Management Committee and be admitted as fellow for life or on a renewable basis (LF/RF) after necessary scrutiny and clearance by the National Executive and payment of prescribed fees. Besides

enjoying all privileges of (ordinary) Members, Fellowship of the Association will carry a place of honour in the Association and some senior positions in the National Executive and in Chapter Management Committees would be open only to Fellows.

- 9. Student Membership will be open to bonafide students at the Bachelor's or post-graduate levels of recognised universities/colleges/institutions or registered for course organised by the Association. They will apply in proper forms and will be admitted as student Member (SM) after payment of prescribed fees and clearance of their application by Chapter Managing Committee or the National Executive as the case may be. They will enjoy all privileges of an (ordinary) member except that they will not be entitled to hold any positions in the National Executive/Chapter Managing Committees.
- 10. Privileges of Members. Members shall be entitled to the following privileges:
 - (a) To participate in all activities of the Association
 - (b) To receive the "Indian Journal of Air Pollution Control"
 - (c) To elect all the various office-bearers at the Chapter and National levels and to hold such offices for which they are qualified and have been duly elected, nominated or appointed to.
- 11. Withdrawal of Membership: A member of any category may withdraw from the Association by signifying his/her wish through a letter addressed to the Secretary General of the Association. The Association shall, however, not be liable to return any part of the subscription earlier paid by the concerned member. All such requests for withdrawal/resignation shall be putup to the National Executive.
- 12. Termination of Membership: The National Executive may by an absolute majority of its total strength terminate the Membership of a person/institution that in its view has done something so unethical, immoral or un-professional which is liable to tarnish the impage of the Association. Such a defaulting person/institution may also be debarred from readmission to membership for such a period as may be specified by the National Executive.

13. Membership Fees: The following will be the

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membership fees for different categories for the period 1984-87. Fees will be reviewed at a

National Convention of the Association aft every four years and revised if necessa

Category A	dmission	every four years Permanent/Life	s and revised if necessary.
(i) For Indians resident in A Institutional		Lije	Annual for Renewable! Membership Per year
 B (Ordinary) Member C Fellow D Student 	Rs. 10 Rs. 10	Rs. 2000/- Rs. 500/- Rs. 1000/-	Rs. 250/- Rs. 60/- Rs. 125/-
(ii) For Non-Indians and N A Institutional	50	_	Rs. 30/-
B (Ordinary) Member \$ C Fellow \$ D Student Member \$	10 10 10	\$ 1000/- \$ 250/- \$ 500/-	\$ 100/- \$ 25/- \$ 50/-
The annual fees in			\$ 15/-

annual fees in the case of Renewable membership shall be for a particular calendar year and no concession shall be made for a member having enjoyed the privileges only during a part of a calendar year. Annual fees shall fall due on January 1 of the concerned year and in case of non-payment till March 31, the membership shall be deemed te have lapsed and re-activation of membership shall be treated as a new admission.

IV. Functioning of Chapters

- 14. Formation of Chapters: Whenever a minimum of 25 members of the Association (of whom not less than 3 are fellows and not more than 10 are student members) are located (either by way of residence or by place of work) within a geographical area of a radius not exceeding 50 kms, they may meet and resolve to constitute themselves into a Chapter. The signed resolution may then be submitted to the National Executive for its consideration and approval.
- 15. A Chapter after due approval from the National Executive shall elect a Chapter Managing Committee to be elected by secret ballot/ show of hands at a meeting of the Chapter announced at least 4 weeks in advance. Any vacancy arising in the middle of the term shall be filled by cooption by the remaining members of the committee. The Chapter Management Committee shall comprise:
 - (i) A Chapter Chairman for a term of 3 years who shall be a Fellow of IAAPC.
 - (ii) A Chapter-Secretary for a term of 3 years from amongst Fellows/Members (Nonstudent)
 - (iii) A Chapter-Treasurer for a term of 3 years from amongst Fellows/Members (Non-
 - (iv) Managing Committee members for a term of one year numbering between 2 and 6.

- 16. (a) A Chapter may organise the following
 - (i) Regular Chapter meetings (not less than once in every 3 months) to discuss various aspects of Air-Pollution and its control (including scientific/technical paper reading, case studies, individual experiences etc.), as also organisational matters like admission of ordinary and student members in their precincts.
 - (ii) Processing applications and admitting new (ordinary) Members and Student Members to their Chapter.
 - (iii) Public awareness campaigns, public meetings, film shows, exhibitions etc.
 - (iv) Publication of cyclostyled news letter.
 - (v) Any other activities with advance approval of the National Executive Committee.
 - (b) A Chapter shall undertake and carry out any functions/tasks directed by the National Executive.
 - (c) A quarterly report of all the activities of a Chapter shall be sent by the Chapter-Secretary to the Secretary General of the National Executive so as to reach the latter positively in the 1st week of March, June, September and December.

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- 17. Each duly constituted Chapter shall be provided Rs. 25 for each Fellow/Member affiliated to the Chapter and Rs. 10 for each student member per year for the normal contingent and other expenses of the Chapter. Full and detailed accounts of expenses shall be provided by the Chapter Treasurer to the Treasurer National Executive on quarterly basis for the quarters ending March, June, September and December.
- The Chapters may raise additional funds but should obtain advance approval from National Executive and should also submit full and detailed accounts.
- 19. The National Executive may, by an absolute majority of its total strength (i) dissolve a Chapter, (ii) dissolve the Chapter Managing Committee and organise fresh elections in supervision of a Returning Officer appointed by the National Executive or (iii) remove any office-bearer or member of Managing Committee of a Chapter from his office and advise the Chapter members to elect a replacement in case such a step is considered expedient in the interest of smooth and effective functioning of the Chapter, image and reputation of the Association and the fulfillment of the aims and objectives of the Association.

V. National Executive

20. The National Executive shall be responsible for Managing all the affairs of the Association, including the following:

- (i) Publication of the Journal and of other publications (excluding cyclostyled Chapter newsletter, if any) of IAAPC, through the Editorial Board constituted as per Section 27;
- (ii) Organising conventions of the Association on a once in two years frequency
- (iii) Organising International/National/Regional Seminars/Symposia/Conferences on Air Pollution Control and related topics;
- (iv) Organising Mass-education campaigns, workshops, courses, certification examination etc. in Air Pollution Control and related areas;
- (v) Coordinating and Supervising the functioning of Chapters;
- (vi) Handling all organisational matters (including admission of Institutional Members and Fellows from all over India or abroad and of (ordinary) Members/ Student Members in areas where Chapters have not yet been constituted),
- (vii) Management of all funds and properties of the Association;
- (viii) Any other activities that could serve the aims and objectives of the Association.
- 21. The National Executive shall comprise of the following from the specified locations and categories of Members and for terms given below:

S. No	Post	Term years	Location and category of Members Eligible
(i)	PRESIDENT	2	FELLOW from Anywhere in India
(ii)	VICE-PRESIDENT	2	FELLOW from DELHI Capital Region
(iii)	SECRETARY-GENERAL	4	FELLOW from DELHI do-
(iv)	EDITOR-IN-CHIEF	4	FELLOW from DELHI do-
(v)	TREASURER	4	FELLOW/MEMBER from DELHI de-
(vi)	JQINT-TREASURER		FELLOW/MEMBER from DELHI de-
(vii)	SECRETARIES	2	ANY INDIVIDUAL MEMBER form DELHI Capital Region
(viii)		2	
(ix)	PUBLICATIONS EDITOR	4	do
(x)	EXECUTIVE COMMITTE	E A	Any category of Members from
to (xv)	MEMBERS	2 a	nywhere but not more than two to be rom DELHI MR

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Besides the above 15 members of the Executive all Chapter Chairmen shall have the Ex-Officio status of an Executive Committee Member and shall be entitled to receive notices, agenda papers and minutes of the meetings of the National Executive and to attend the same whenever they can conveniently do so. They shall have voting rights in case need for voting arises at the meeting but shall not count for quorum.

- 22. The National Executive shall be elected by Secret Ballot at a General Body Meeting by all categories of members present. Any vacancies arising midway shall be filled by cooption from amongst National Executive Members and Chapter Managing Committee Members by the remaining members of the Nation: 1 Executive for the remainder of the term.
- 23. The National Executive shall meet at least once in three months to transact business and the minimum quorum shall be 6; at least one from (i) and (ii), at least one from (v) and (vi), at least one from (iv) and (ix), at least one from (iii), (vii) and (viii) and any others. The committee may frame its own rules of business.

VI. General Body Meetings

- 24. The General Body of IAAPC will normally meet only once in 2 years in the form of a National Convention to take stock of organisational and other matters and adopt suitable policies and programmes, elect the National Executive approve budget proposals, audited accounts and annual reports and transact other business.
- 25. Special general body meetings may be called by

the National Executive on its own and must called when requisitioned through a resolutisigned by a minimum of 100 members or duly constituted Chapters. A minimum 4 wei notice will be required for General Bc Meetings.

26. The quorum at all GBM, requisitioned otherwise shall be 50% of the registen Members or 200, whichever is less. All decision except amendments to constitution at sur meetings shall be taken by a simple majori decided by show of hands/secret ballot.

VII. Editorial Board

27. The Editorial Board shall manage the publication of the "Indian Journal of Air Pollutic Control" and any other Publications that the Association may decide to being out in printe form. The Secretary General, the Editor-in Chief and the Publications Editor, elected to these respective posts as a part of the Nationa Executive shall form the core of the Editoria Board. These three will recommend a panel or names to the National Executive to nominate up to six other members on the Editorial Board who can be from anywhere in India or abroad

VIII. Amendment of Constitution

28. Proposed Amendments cleared by the National Executive shall be circulated to all members at least 4 weeks before a General Body Meeting at which they are to be considered. They shall be passed by a 2/3 majority of those present at a meeting satisfying quorum with not less than 100 members (Non-Student) voting in favour of the amendment.

Executive Committee for the Year 1983

President

National Vice-President

Vice-President

Secretary General & Chief Editor

Secretary & Editor

ublication Editor

reasurer

Prof. J.M. Dave Prof. of Environmental Science, School of Environmental Sciences, J.N.U., New Delhi-110067.

Dr. G.D. Agrawal, Member Secretary, Central Pollution Control Board, 60, Nehru Place, New Delhi-110019.

1. Prof. D.N. Rao, B.H.U. Varanasi

- 2. Dr. R.C. Trivedi, Advisor, Govt of Gujarat, Gujarat.
- Shri Y.R. Pakkala, Dy. General Manager, R.C.F, Chember, Bombay.
- Shri A.P. Roy, Chief Design Engineer, MECON, Ranchi.

Prof. H.B. Mathur, Prof. of Mechanical Engineering, Co-ordinator Air Pollution RRD Studies Programme, Indian Institute of Technology, Hauz Khas, New Delhi-110016.

- Dr. B. Sengupta, Scientist Incharge Air Pollution Control Cell, Central Pollution Control Board (SO-Delhi-Chandigarh), A-1, Chandra House, Dr. Mukherjee Nagar, Delhi-110009
- Dr. D.K. Banerjee, Associate Professor, School of Environmental Science, J.N.U., New Delhi.
- Shri Chiranjiv Chakarverty, Dy. Chief Design Engineer, NTPC, Nehru Place, New Delhi-110019.
- Dr. Krishna Pal, Lecturer, Centre for Energy Studies, I.I.T., New Delhi.
- Sh. Vijay M. Nagarkar, Asstt. Medial Officer Central Pollution Control Board, 60, Nehru Place, New Delhi-110019.
- Sh. V.S. More, Sr. Manager, (Pollution Control), Indian Oil Corporation, Janpath, New Delhi.

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Co-Treasurer

Executive Committee Members

1. Sh. S.K. Gupta, Envirotech, 27-M Block Market, Greater Kailash, New Delhi.

- 1. Sh. H.C. Sharma, Nangal Fertilizers, Nangal 2. Sh. M.L. Prabhakar, Member Secretary, Haryana Pollution Control Board, Chanfind
- 3. Sh. M.M. Lal, I.T.R.C., Lucknow. 4. Dr. C.K. Varshney, J.N.U.
- New Delhi.
- 5. Sh. V.K.K. Swamy, SICO, New Delni.
- 6. Prof. H.V. Bhavnani, M.S. University, Barain 7. Dr. B.K.D. Agarwal, B.H.U., Varanasi

FIRST ANNUAL CONVENTION A N D SYMPOSIUM OF INDIAN ASSOCIATION FOR AIR POLLUTION CONTROL



November 23-25, 1983

VENUE

Indian Institute of Technology HAUZ KHAS, P.O.-I.I.T., NEW DELHI- 110016 INDIA

INVITATION

You are cordially invited to participate in the First Annual Convention of Indian Association for Air Pollution Control and symposium scheduled to be held at Indian Institute of Technology, New Delhi on November 23-25, 1983.

OBJECTIVE

The objective of this symposium is to bring together, scientists, technologists, administrators and decision makers in the field of air pollution and to provide a forum for exchange of informations and experiences. The symposium will cover the following aspects:

- Emission from stationary sources
- □ Emission from mobile sources
- Effects of Air Pollution and Techniques of damages assessment
- Simulation and computational analysis of Air Pollution
- Control of Air Pollution and its Economics
- Act, legislation, standards and regulatory trends
- Air quality data survey and techniques

ABSTRACT

Three typed copies of abstract upto 300 words, in English language on bond paper should be submitted to Secretary General latest by July 15, 1983. The abstract will be subject to peer review and confirmation of accepted abstract will be communicated by 30th July, 1983. The authors of accepted abstracts are expected to submit the full paper positively by 30th August, 1983. FIRST ANNUAL CONVENTION AND SYMPOSIUM

OF INDIAN ASSOCIATION FOR AIR POLLUTION CONTROL I.I.T., New Delhi - 110016

23-25 November, 1983

Please check

I plan to attend and need accomodation for

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number in party

Date

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As	soc	iatio	n for Air P	ollution (Control	at

..... New Delhi, as my registration fee.

Participant from Industries

- Participant from Educational Institutions/ Research Organisation (Non-member)
- Member of Indian Association of Air Pollution Control
- D Bonafide Student participant

Participant from abroad.

Place..... Date..... Signature

ODLICATIONS

The accepted papers and detailed programme will be circulated in advance to the participants. It is proposed to publish the accepted papers in the form of proceedings.

REGISTRATION

Registration fees are as follows : 1. Participants from Industries Govt. undertakings	- 250.00
2. Participants from Educational Institution/Research	
Organisation (non-member) 3. Members of the Indian Association for Air Pollution	150.00
Control	100.00
4. Bonafide student/participant	75.00
5. Participants from abroad US. \$	35.00

MAILING ADDRESS

Prof. (Dr.) H. B. MATHUR Secretary General, Indian Association for Air Pollution Control, Mechanical Engineering Department, Indian Institute of Technology, Hauz Khas, P.O. I. I. T., New Delhi - 110016 INDIA

DEAD LINES

- July 15, 1983—Submission of three copies of abstract, registration form, payment of registration fee.
- July 30, 1983—Accepted abstract information will be communicated to authors.
- August 30, 1983—Submission of three copies of full paper.

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PREPARATION OF ABSTRACTS

The abstract should be typed on one side of a good quality bond paper measuring 23×28 cm. The text of the abstract should be typed, single spaced, in an area measuring 16 cm horizontally and 21 cm vertically. The left and right hand margins should each measure 3 cm, the upper and lower 2.5 cm. Title of the paper should be in capital letters and centered horizontally on the first line below the margin. Allow two blank spaces before typing the authors name and affiliation. Mathematical formulas should be centered horizontally on the page and numbered consecutively with the number enclosed in parentheses at the right margin. No tables, figures and illustration should be given in the abstract.