



**ISNET**

**REPORT FOR THE  
FOURTEENTH GENERAL ASSEMBLY  
MEETING OF COMSTECH**

**ISLAMABAD  
11 – 13 January 2011**

**INTER-ISLAMIC NETWORK ON SPACE SCIENCES AND TECHNOLOGY**

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## **Executive Summary**

1. ISNET was founded by nine OIC Member States: Bangladesh, Iraq, Indonesia, Morocco, Niger, Pakistan, Saudi Arabia, Tunisia and Turkey, while Syria joined in 1997 and Islamic Republic of Iran and Sudan joined in 2004. Azerbaijan and Senegal joined the network in the year 2009, thus increasing the Membership of ISNET to 14 Islamic countries.

2. ISNET has been submitting its activity reports at the COMSTECH General Assembly Meetings since 1989. The activities of the Network, since the Thirteenth COMSTECH General Assembly Meeting in April 2008, were also brought to the attention of its member institutions as well as Headquarters of other Inter-Islamic Networks and relevant institutions in the OIC region through the publication of its periodic newsletter ISNET NEWS, write-ups, announcements of opportunities and its website. ISNET makes every effort to keep in touch with its constituent members, solicits their cooperation and advice on important issues of mutual interest and involves them in its activities to better serve the cause of the network.

3. The main objective of ISNET are:

- a. To collaborate and cooperate with OIC member countries in the peaceful uses of outer space
- b. To exchange information, share experiences and maintain dialogue on the developments in Space Science, Space Technology and their applications among OIC member countries
- c. To create and maintain a Data Bank of expertise and scientific data in the field of Space Science, Space Technology and their Application among the OIC member countries
- d. To initiate joint projects of Space Sciences, Space Technology and their applications among the OIC member countries
- e. To render consultancy and advisory services
- f. To help and assist in training to develop the quality manpower of OIC countries (Organisation of periodic Short and Long term training courses, training workshops / on the job training)

4. To fulfill its objectives and to help augment the Human Resource Development and capacity building efforts of member countries, ISNET sponsored participants from member countries to attend the following training courses organised by SUPARCO:

- **Training Course on Remote Sensing & Digital Image Processing;** 07 – 18 April 2008 in Karachi.
- **Training Course on Climate Change and Natural Resources Management;** 15 – 18 July 2008 in Lahore.
- **Training course on Remote Sensing & Geographic Information System;** 04 – 15 August 2008 in Karachi.
- **Training Course on Space Weather Monitoring;** 19 – 21 August 2008 in Karachi.
- **Training course on Remote Sensing & Digital Image Processing;** 13 – 24 April 2009 in Karachi.
- **Training course on Remote Sensing & GIS;** 13 – 24 July 2009 in Karachi.

5. ISNET also sponsored participants from OIC member countries to attend the following event:

- The first **International Conference on Aerospace Science & Engineering (ICASE - 2009)** organised by Institute of Space Technology (IST) from 18 – 20 August 2009 in Islamabad.

6. ISNET collaborated with different focal point institutions in member countries to hold the following events and sponsored participants from OIC member countries to attend:

- **Training Workshop on Satellite Technology Applications in Communications and Remote Sensing** from 5 – 8 May 2008 in Lahore in collaboration with SUPARCO, Islamic Educational, Scientific and Cultural Organisation (ISESCO) and COMSTECH.
- **Training Course on Synthetic Aperture Radar Images: Acquisition, Characteristics and Applications** from 12 – 16 May 2008 in Damascus, Syria in collaboration with General Organisation of Remote Sensing (GORS) of Syria, North African Center for Remote Sensing (CRTEAN) and SUPARCO.
- **International Seminar on Space Technology and Applications for Sustainable Development** from 24 – 27 November 2008 in Tunis, Tunisia in collaboration with North African Center for Remote Sensing (CRTEAN), SUPARCO, COMSTECH and IDB.

- **Workshop on SAR and Optical Data for Natural Resources and Environmental Management** from 02 – 05 November 2009 in Damascus, Syria in collaboration with General Organisation of Remote Sensing (GORS) of Syria, SUPARCO, COMSTECH and IDB.

7. A number of activities were undertaken in the year 2010 including sponsorship of participants from member countries for attending three training courses organised by SUPARCO, organisation of a specialized advanced training course on Synthetic Aperture Radar Data: Processing, Interpretation and Applications, a Training course on Geological Applications of Remote Sensing as well as a Seminar on Seminar on Bridging the Gap through Satellite Technology. ISNET's host organisation SUPARCO and parent organisation COMSTECH have extended great support to the network and made these activities possible. The generous funding of the Islamic Development bank (IDB) for two events in 2010 has been a great support.

8. On behalf of ISNET, I owe my special thanks to the Honourable Prof Dr Attaur-Rahman and Government of Pakistan for releasing generous grants of USD 50,000/- each in years 2008 and 2009. I also take this opportunity to thank the Governments of Azerbaijan and Senegal for supporting and joining the network. Thanks are also due to the governments of Bangladesh, Iraq, Saudi Arabia, Sudan and Syria for continued membership contributions in the years 2008 and 2009. I also wish to thank COMSTECH for supporting and recommending ISNET's events and to Islamic development Bank (IDB) for generously sponsoring events organised by the network. Last but not the least I would like to thank Pakistan Space & Upper Atmosphere Research Commission (SUPARCO) the host organisation of ISNET for providing the human resources, office accommodation, and administrative and logistic support to the network. Without the help and concerted efforts of all our supporters we would not have been able to achieve all that we have achieved so far.

9. Before signing off, I would like to avail this opportunity to again request the Honourable Leaders of the OIC member states to provide their political, moral and material support to the ISNET focal point institutions in their respective countries and through them to the activities of the network. I also invite leaders of the OIC member states that are not members of ISNET to explore the opportunities that ISNET has to offer and consider joining the network through their national space coordinators. Let me assure you that the benefits that the network has to offer greatly outweigh your membership contributions.

10. May Allah Almighty crown our efforts with success for the benefit of the Muslim Ummah in particular and the whole mankind in general and May Allah bring peace, unity and stability to our ranks.

**Arshad H Siraj**  
**Executive Director, ISNET**

# **ISNET Activity Report for the Years 2008 and 2009**

## **Introduction**

1. The Inter Islamic Network on Space Sciences and Technology (ISNET), founded in October 1987, has been submitting its activity reports at the COMSTECH General Assembly Meetings regularly since 1989. The activities of the Network, since the Thirteenth COMSTECH General Assembly Meeting in April 2008, were also brought to the attention of its member institutions as well as Headquarters of other Inter-Islamic Networks and relevant institutions in the OIC region through the publication of its periodic newsletter ISNET NEWS, write-ups, announcements of opportunities and its website. ISNET makes every effort to keep in touch with its constituent members, solicits their cooperation and advice on important issues of mutual interest and involves them in its activities to better serve the cause of the network.

2. ISNET was founded by nine OIC Member States: Bangladesh, Iraq, Indonesia, Morocco, Niger, Pakistan, Saudi Arabia, Tunisia and Turkey, while Syria joined in 1997 and Islamic Republic of Iran and Sudan joined in 2004. Azerbaijan and Senegal joined the network in the year 2009, thus increasing the Membership of ISNET to 14 Islamic countries. The host organisation of ISNET is Pakistan Space & Upper Atmosphere Research Commission (SUPARCO). SUPARCO provides the human resources, office accommodation, and administrative and logistic support to ISNET. ISNET has a three-tiered structure, namely: the Governing Body, the Executive Council, and the Secretariat. The Governing Body comprises the representatives of the Member States and a representative of COMSTECH. It is the supreme decision-making body and is required to meet at least once every two years.

3. The major objectives of ISNET are:

- a) To collaborate and cooperate with OIC member countries in the peaceful uses of outer space.
- b) To exchange information, share experiences and maintain dialogue on developments in Space Sciences, Space Technology and their Applications among OIC member countries.
- c) To create and maintain a data bank of human expertise and scientific data in the fields of Space Sciences, Space Technology and their Applications available in OIC member countries.
- d) To initiate joint projects of Space Sciences, Space Technology and their Applications among the OIC member countries.
- e) To render consultancy and advisory services.

- f) To help and assist OIC countries in developing quality manpower through organization of periodic short and long term training courses, workshops, seminars and symposia.
4. A few member countries have been inactive for some time. COMSTECH Secretariat has been requested to revive their interest in the network through initiatives at the ministerial level. Efforts are being made to encourage Egypt and Libya to become members and Morocco and Turkey to become active members of the network. Contribution of membership fees has significantly improved during the years 2008 and 2009. One of the founding members, Iraq which was dormant for some years, has become active again.
5. ISNET sponsors participants from ISNET member countries for various training courses arranged by SUPARCO throughout the year. These courses include a wide range of topics related to space technology and applications, upper atmosphere & environmental studies, and their applications. In addition to this, ISNET also partners with member institutions and other regional organisations to hold training courses in advanced technologies thereby ensuring that more trainees from different OIC member countries acquire training at the same platform and the training cost is reduced with the participation of other partners. Since the ISNET training courses are now attended by professionals of diverse backgrounds and from different institutions and countries, these offer greater potential of experience sharing and relationship building among participants. Most courses have received a very good response and the trainees' feedback on quality and content of training has been positive.

#### **Training Course on Remote Sensing & Digital Image Processing**

6. ISNET sponsored four participants, two each from Bangladesh Space Research and Remote Sensing Organization (SPARRSO) and General Organization of Remote Sensing (GORS), Syria, for participating in a two-week training course on Remote Sensing & Digital Image Processing organised by SUPARCO from 07-18 April 2008 at National Center for Remote Sensing and Geoinformatics (NCRG), Karachi.
7. The course imparted knowledge and developed skills in state-of-the-art remote sensing technologies and their applications through various exercises, case studies and hands-on training.

#### **Training Workshop on Satellite Technology Applications in Communications and Remote Sensing**

8. ISNET and SUPARCO jointly organised a Training Workshop on Satellite Technology Applications in Communications and Remote Sensing from 5 - 8 May 2008 in Lahore, Pakistan. COMSTECH and Islamic Educational, Scientific and Cultural Organisation (ISESCO) supported and sponsored the workshop.

9. The thirty participants at the workshop included mostly local from different public and private sector organisations as well as three from Sudan, Yemen and a Pakistani student from the UK.

10. Participants took keen interest in learning about different applications of space technologies that could possibly be applied in their own organisations. A separate hands-on training session focusing on practice on different software used in image interpretation was also organised.

### **Training Course on Synthetic Aperture Radar Images: Acquisition, Characteristics and Applications**

11. ISNET collaborated with North African Centre for Remote Sensing (CRTEAN) and General Organisation of Remote Sensing (GORS) Syria to arrange a specialized Training Course on Synthetic Aperture Radar Images: Acquisition, Characteristics and Applications from 12 – 16 May 2008, at GORS Headquarters, Damascus, Syria. Professor François Cavayas of University of Montreal, Canada conducted the training course; twenty six persons from 06 Islamic countries participated in the training. ISNET sponsored 10 participants.

12. The main objective of the training was to expose the participants to the interpretation/analysis, processing and applications of SAR data in different application disciplines. Although the 5-day training course dwelled mainly on the theoretical aspects of SAR imagery and its interpretation, a few hands-on training exercises were included to familiarize participants with SAR data processing.

### **Training Course on Climate Change and Natural Resource Management**

13. ISNET sponsored two participants from Remote Sensing Authority (RSA), Sudan for participation in a 4-day Training Course on Climate Change and Natural Resources Management from 15 – 18 July 2008 organised by SUPARCO at its Lahore office.

14. The course comprised lectures on different aspects of climate changes and its impacts on natural resources and included hands-on training on the use of satellite data for analysis and management of natural resources. Mr. Gary Quinn, Chief Engineer at Environmental Systems & Services (ES&S), Australia also delivered a lecture on receiving and processing satellite data useful for Natural Resource Management. Participants took keen interest in issues and applications discussed by the trainers.

### **Advanced Training on Remote Sensing & GIS**

15. ISNET sponsored two participants from RSA, Sudan for participation in a two-week training course on Remote Sensing & Geographic Information System



from 04 – 15 August 2008 at National Center for Remote Sensing and Geoinformatics (NCRG), Karachi.

16. The course sought to impart knowledge and develop skills in the latest advancements in remote sensing applications through various exercises and hands-on training. Topics included advancement in satellite remote sensing, concepts of digital image processing, handling of GPS, latest developments in GIS analysis techniques.

### **Training Course on Space Weather Monitoring**

17. In order to develop cooperative links between member countries, ISNET sponsored Mr Jiyo Harjo Suwito, a seasoned researcher heading the Space Sciences Department at LAPAN, Indonesia for a visit to Pakistan for sharing knowledge on activities in Space Sciences related fields. Mr Suwito visited Karachi for two days in August 2008 and delivered two lectures on Ionospheric Research and its applications at the Training Course on Space Weather Monitoring organised by SUPARCO from 19 – 21 August 2008.

### **International Seminar on Space Technology and Applications for Sustainable Development**

18. ISNET held its Annual Seminar 2008 titled International Seminar on Space Technology and Applications for Sustainable Development from 24 - 27 November 2008 in Tunis, Tunisia. The North African Centre for Remote Sensing (CRTEAN), Tunisian National Center for Remote Sensing (CNT), Tunisian Association of Communication & Space Sciences (ATUCOM) Pakistan Space & Upper Atmosphere Research Commission (SUPARCO) and OIC Standing Committee on Scientific and Technological Cooperation (COMSTECH) collaborated with ISNET to hold this event. The Islamic Development Bank (IDB) granted a generous sponsorship for the Seminar.

19. More than 70 participants from fifteen countries including Algeria, Azerbaijan, Bangladesh, France, Jordan, Libya, Morocco, Nigeria, Pakistan, Senegal, South Korea, Sudan, Syria, Tunisia and USA attended the 4-day Seminar.

### **The Seventh Governing Body Meeting of ISNET**

20. The Seventh Governing Body Meeting of ISNET was held on 25 November 2008 in Tunis in conjunction with the ISNET International Seminar on Space Technology and Applications for Sustainable Development held in Tunis, Tunisia. The following attended the Meeting:

- i. Dr Muhammad Ali Mahesar ... Chairman  
Assistant Coordinator General **COMSTECH**

- |       |  |     |                    |
|-------|--|-----|--------------------|
| ii.   | Mr Md Nazmul Huda Khan ndc<br>Chairman, Space Research and Remote<br>Sensing Organization (SPARRSO)<br><b>Bangladesh</b> | ... | Member             |
| iii.  | Dr Amna A Hamid<br>Director, Remote Sensing Authority (RSA)<br><b>Sudan</b>  | ... | Member             |
| iv.   | Dr Younes Idriss<br>Director, Agro Studies<br>General Organisation of Remote Sensing (GORS)<br><b>Syria</b>              | ... | Member             |
| v.    | Mr Neji Fekih<br>Director General, North African Center for Remote<br>Sensing (CRTEAN), <b>Tunisia</b>                   | ... | Member             |
| vi.   | Dr Alchin Shirinzada<br>Director General, National Aerospace Agency (NASA),<br><b>Azerbaijan</b>                         | ... | Observer           |
| vii.  | Ms Nivin Hasan<br>Researcher, Royal Jordanian Geographic Center<br>(RJGC), <b>Jordan</b>                                 | ... | Observer           |
| viii. | Mr M Oumar Sarr<br>Administrator, Centre de Suivi Ecologique (CSE)<br><b>Senegal</b>                                     | ... | Observer           |
| ix.   | Mr Arshad H Siraj<br>Executive Director, ISNET   | ... | Executive Director |

21. Mr Arshad H Siraj, Executive Director of ISNET, briefed the governing body about the progress on decisions taken at the Sixth GBM, as well as past activities, future plans, and details of expenditure of the network. He also presented the budget for the years 2009 & 2010. The GB reviewed with satisfaction the progress of ISNET during the years 2006 & 2007 and appreciated ISNET's growing activities in 2008. The GB suggested measures for reviving participation of member countries in ISNET activities and suggested ISNET Secretariat to write to the focal point institutions of the observers to become members of ISNET. The body also approved the activity plan and budget of ISNET for the years 2009 and 2010.

22. The Secretariat had presented scholarship schemes for degree programmes in different fields of space technology at the Institute of Space Technology (IST) in Islamabad. Considering the long-term financial commitment that such an undertaking required, the Governing Body suggested that ISNET should seek sponsorship from IDB for the same.

### **ISNET Journal on Space Sciences and Technology Vol. II**

23. ISNET has published the ISNET Journal Vol II in 2008. The journal contains 11 research papers which have been selected by panelists from Iran, Pakistan, Bangladesh and Syria. The journal has been disseminated to ISNET member space agencies and contact points in OIC member countries as well as participants at various ISNET events.

### **Training Course on Remote Sensing & Digital Image Processing**

24. ISNET sponsored 4 participants, two from Bangladesh and two from RSA, Sudan, for participation in a two-week training course on Remote Sensing & Digital Image Processing organised by SUPARCO from 13-24 April 2009 at the National Center for Remote Sensing & Geoinformatics (NCRG), Karachi.

25. The course imparted knowledge and developed skills in the latest technologies in Remote Sensing for development of practical applications targeted for national use.

### **Advanced Training on Remote Sensing & GIS**

26. ISNET sponsored 6 participants: one from SPARRSO, Bangladesh, three from RSA, Sudan, one from Peshawar University and one from Soil Survey of Pakistan for a two week training course on Remote Sensing & GIS from 13-24 July 2009 organised by SUPARCO at the National Center for Remote Sensing & Geoinformatics (NCRG), Karachi.

### **Workshop on SAR and Optical Data Applications for Natural Resources and Environmental Management**

27. ISNET in collaboration with General Organisation of Remote Sensing (GORS) held its annual workshop titled Workshop on SAR and Optical Data for Natural Resources and Environmental Management at GORS Headquarters from 02 – 05 November 2009 in Damascus, Syria. The event was held in collaboration with Pakistan Space & Upper Atmosphere Research Commission (SUPARCO) and OIC Standing Committee on Scientific & Technological Cooperation (COMSTECH). Islamic Development Bank (IDB) provided sponsorship for the event.

28. The theme of the workshop was specially selected keeping in view the importance of natural resources and environmental management for developing countries. Apart from discussing research projects undertaken using traditional optical imaging techniques, the workshop also focused, and more keenly explored, the emerging applications of advanced technologies like Synthetic Aperture Radar (SAR) imagery. Since gaining expertise in advanced technologies is not financially viable for most developing countries, the pooling of resources presents the best option for capacity building. It was with this thought in mind that ISNET and GORS jointly arranged this workshop for the benefit of the OIC member countries. This was the second workshop that GORS hosted for ISNET in two years.

### **New members of ISNET**

29. After attending the Seventh GBM of ISNET, the observers supported the cause of ISNET and gathered support for their countries to become members of the network. Subsequently Azerbaijan and Senegal paid joining fee of USD 1,000/- each and became the members of the network. The National Aerospace Agency (NAA) has become the ISNET focal point organization in Azerbaijan and the Centre de Suivi Ecologique (CSE) is the ISNET focal point organization in Senegal.

### **Financial Support for ISNET**

30. During the period of the report, ISNET received the following grants/fees:

1) Contribution from Government of Pakistan (2008)	\$ 41,920/-
2) Membership Fee from Bangladesh (2006, 2007)	\$ 1,955/-
3) Membership Fee from Bangladesh (2008)	\$ 1,000/-
4) Membership Fee from Sudan (2008)	\$ 1,021/-
5) Membership Fee from Iraq (2006, 2007, 2008)	\$ 2,990/-
6) Membership Fee from Saudi Arabia (2008)	\$ 5,000/-
7) Sponsorship from IDB for 2008 Seminar	\$ 35,713/-
8) Sponsorship from ISESCO through COMSTECH for Workshop 2008	\$ 30,000/-
9) Contribution from Government of Pakistan (2009)	\$ 37,251/-
10) Membership Fee from Sudan (2009)	\$ 1,000/-
11) Membership Fee from Syria (2008, 2009)	\$ 10,000/-
12) Membership Fee from Iraq (2009)	\$ 1,000/-
13) Membership Fee from Bangladesh (2009)	\$ 1,000/-
14) Membership Fee from Saudi Arabia (2009)	\$ 5,000/-
15) Joining Fee from Azerbaijan (joined in 2009)	\$ 1,000/-
16) Joining Fee from Senegal (joined in 2009)	\$ 1,000/-
17) Sponsorship from IDB for 2009 Seminar	\$ 16,000/-
<b>Total:</b>	<b><u>US\$ 192,850/-</u></b>

31. Expenditure during Period of the Report:

1) Training Course on Remote Sensing & Digital Image Processing (07-18 Apr 2008)	\$ 5,445/-
2) Training Course on Climate Change & Resource Management (15 – 18 July 2008)	\$ 2,664/-
3) Training Course on Remote Sensing & GIS (04-15 Aug 2008)	\$ 3,651/-
4) Training Course on Space Weather Monitoring (19-21 Aug 2008)	\$ 1,204/-
5) Training Course on SAR Imagery: Acquisition, Interpretation & Processing (12-16 May 2008)	\$ 14,608/-
6) Training Workshop on Satellite Technology & Applications for Communications & Remote Sensing (5-8 May 2008)	\$ 24,906/-
7) ISNET Workshop on Space Technology and Applications for Sustainable Development (24-27 Nov 2008)	\$ 46,964/-
8) Training Course on Remote Sensing & Digital Image Processing (13-24 Apr 2009)	\$ 4,697/-
9) Training Course on Remote Sensing & GIS (13-24 July 2009)	\$ 8,097/-
10) International Conference on Aerospace Science & Engineering (ICASE - 2009) (18-20 August 2009)	\$ 4,276/-
11) Workshop on SAR and Optical Data for Natural Resources and Environmental Management; 26-29 Oct 2009	\$ 44,227/-
12) Administrative Expenses (2008,2009)	\$ 4,868/-
13) ISNET Journal Volume II	\$ 2,308/-

**Total: US\$ 167,911 /-**

## **CONCLUSION**

32. ISNET, with the active support of SUPARCO, COMSTECH and IDB has been fairly successful in meeting its objectives. There is increasing interest in, and appreciation of, the importance of space applications amongst members of the OIC. Realizing the benefits of the network, ISNET member countries are

taking keener interest and participation in the activities of the network. ISNET continues its efforts to create awareness of the benefits of space technology and its various applications to the development of countries. It is hoped, that realizing the benefits of space technology, a greater number of Muslim countries will strive to develop capacity in the use of space technology applications as well as conduct research for indigenous development of technologies in the field. Since education and training in space related fields is costly and a major factor retraining developments in the field, ISNET provides an excellent platform for synergizing of efforts and resources for mutually benefiting from the knowledge, skills and expertise of member countries.

***May Allah crown our efforts with success for the  
collective benefit of the Muslim Ummah.***

## **A SUMMARY OF PROGRESS OF ISNET**

ISNET has, to date, registered the following progress:

1. Collaborated with Pakistan Space & Upper Atmosphere Research Commission (SUPARCO) to jointly organise an **International Training Course on Satellite Search and Rescue** in Lahore.
2. Collaborated with SUPARCO and Institute of Electrical and Electronics Engineering (IEEE) of Pakistan to jointly organise a **Seminar on Satellite Communications** in Lahore.
3. Collaborated with SUPARCO to jointly organise a **Seminar on Urban Planning and Environmental Monitoring Using Satellite Remote Sensing Data**.
4. Co-sponsored the **Fourth APCMSTA meeting** from 30 November – 04 December 1997.
5. Collaborated with SUPARCO and COMSTECH to jointly organise an **International Course on Remote Sensing and GIS Applications** from 24 August – 01 September 1998.
6. Collaborated with SUPARCO, OIC Standing Committee on Scientific and Technological Cooperation (COMSTECH) and Islamic Development Bank (IDB) to jointly organise an **International Workshop on Low Cost Space Missions** from 24 November – 04 December 1999 in Islamabad.
7. Collaborated with SUPARCO, COMSTECH and IDB to jointly organise an **International Seminar on Natural Hazards Monitoring** from 7 – 11 January 2002 in Karachi.
8. Collaborated with SUPARCO, COMSTECH and IDB to jointly organise an **International Workshop on Satellite Imaging Technology and Applications** from 22 – 28 January 2003 in Karachi.
9. Collaborated with SUPARCO to jointly organise a **Short Training Course on Environmental Studies Using Satellites, Balloons and Ground Based Data** from 12 – 23 January 2004 in Karachi.
10. Collaborated with SUPARCO to jointly organise an **Advanced Training Course on Applications of Satellite Remote Sensing (SRS) Technology and Geographic Information system (GIS)** from 19-23 April 2004 in Karachi.

11. Collaborated with Iranian Space Agency (ISA), SUPARCO, COMSTECH and IDB to jointly organise an **International Seminar on Satellite Technology Applications in Communications and Remote Sensing** from 09-15 October 2004 in Tehran, Iran.
12. Collaborated with SUPARCO, COMSTECH and IDB to jointly organise a **Training Course on Environmental Monitoring** from 25 – 29 July 2005 at Karachi.
13. Collaborated with SUPARCO, COMSTECH and IDB to jointly organise a Training Course on Remote Sensing Technology and GIS from 01 – 05 August 2005 in Karachi.
14. Collaborated with Remote Sensing Authority (RSA) of Sudan, SUPARCO, COMSTECH and IDB to jointly organise an **International Workshop on Space Technology for Peace, Rehabilitation and Development** from 26 – 29 September 2005 in Khartoum, Sudan.
15. Sponsored participants from OIC member countries for participation in Advanced Training on Remote Sensing & GIS organised by SUPARCO from 13 – 24 May 2006 in Karachi.
16. Sponsored participants from OIC member countries for participation in Training course on Photogrammetry & Remote Sensing organised by SUPARCO from 21 – 31 August 2006 in Karachi.
17. Collaborated with SUPARCO, Institute of Space Technology (IST) of Pakistan, COMSTECH and IDB to jointly organise an **International Seminar on Space Technology & Applications** from 11 – 15 September 2006 in Islamabad.
18. Sponsored participants from OIC member countries for participation in Training course on Remote Sensing & Digital Image Processing organised by SUPARCO from 18 – 29 December 2006 in Karachi.
19. Sponsored participants from OIC member countries for participation in a Short Training Course on Impact of Solar Radiation on Earth, Ionosphere and Geomagnetic Field organised by SUPARCO from 25 – 26 July 2007 in Karachi.
20. Collaborated with General Organisation of Remote Sensing (GORS) of Syria, SUPARCO and COMSTECH to jointly organise a Seminar on Remote Sensing for Water Resources Management from 27 – 29 August 2007, in Damascus, Syria.



21. Sponsored participants from OIC member countries for participation in a Training course on Geographic Information System organised by SUPARCO from 22 October – 02 November 2007 at Karachi.
22. Sponsored participants from OIC member countries for participation in a Training course on Atmospheric Sciences organised by SUPARCO from 27 – 30 November 2007 in Karachi.
23. Sponsored participants from OIC member countries for participation in a Training Course on Remote Sensing & Digital Image Processing, organised by SUPARCO from 07 – 18 April 2008 in Karachi.
24. Sponsored participants from OIC member countries for participation in a Training Course on Climate Change and Natural Resources Management organised by SUPARCO from 15 – 18 July 2008 in Lahore.
25. Collaborated with SUPARCO, Islamic Educational, Scientific and Cultural Organisation (ISESCO) and COMSTECH to jointly organise a Training Workshop on Satellite Technology Applications in Communications and Remote Sensing from 5 – 8 May 2008 in Lahore.
26. Collaborated with General Organisation of Remote Sensing (GORS) of Syria, North African Center for Remote Sensing (CRTEAN) and SUPARCO jointly organise Training Course on Synthetic Aperture Radar Images: Acquisition, Characteristics and Applications from 12 – 16 May 2008 in Damascus, Syria.
27. Sponsored participants from OIC member countries for participation in a Training course on Remote Sensing & Geographic Information System; organised by SUPARCO from 04 – 15 August 2008 in Karachi.
28. Sponsored participants from OIC member countries for participation in a Training Course on Space Weather Monitoring organised by SUPARCO from 19 – 21 August 2008 in Karachi.
29. Collaborated with North African Center for Remote Sensing (CRTEAN), SUPARCO, COMSTECH and IDB to jointly organise an International Seminar on Space Technology and Applications for Sustainable Development from 24 – 27 November 2008 in Tunis, Tunisia.
30. Sponsored participants from OIC member countries for participation in the Training course on Remote Sensing & Digital Image Processing organised by SUPARCO from 13 – 24 April 2009 in Karachi.

31. Sponsored participants from OIC member countries for participation in a Training course on Remote Sensing & GIS organised by SUPARCO from 13 – 24 July 2009 in Karachi.
32. Sponsored participants from OIC member countries for participation in the first International Conference on Aerospace Science & Engineering (ICASE - 2009) organised by Institute of Space Technology (IST) from 18 – 20 August 2009 in Islamabad.
33. Collaborated with General Organisation of Remote Sensing (GORS) of Syria, SUPARCO and COMSTECH to jointly organise a Workshop on SAR and Optical Data for Natural Resources and Environmental Management from 02 – 05 November 2009 in Damascus, Syria.

## **PUBLICATIONS OF ISNET**

1. A booklet on the Inter Islamic Network on Space Sciences and Technology (ISNET) (May 1989)
2. Statutes and Rules of Procedure of ISNET
3. ISNET NEWS: to-date twenty-five issues have been published
  
4. Report for the Fourth COMSTECH General Assembly Meeting (1989)
5. Report for the Fifth COMSTECH General Assembly Meeting (1991)
6. Report for the Sixth COMSTECH General Assembly Meeting (1993)
7. Report for the Seventh COMSTECH General Assembly Meeting (1995)
8. Report for the Eighth COMSTECH General Assembly Meeting (1997)
9. Proceedings of International Workshop on Low Cost Space Missions, 24 November - 04 December 1999
10. Report for the Ninth COMSTECH General Assembly Meeting (1999)
11. Report for the Tenth COMSTECH General Assembly Meeting (2002)
12. Proceedings of the International Seminar on Natural Hazards Monitoring, Karachi, Pakistan: 7-11 January 2002
13. Report for the Eleventh COMSTECH General Assembly Meeting (2003)
14. Proceedings of International Workshop on Satellite Imaging Technology and Applications, Karachi, Pakistan: 22-28 January 2003
15. ISNET Journal of Space Sciences & Technology Volume I, 2004
16. Proceedings of International Seminar on Satellite Technology Applications in Communications and Remote Sensing, Tehran, Iran: 9-15 October 2004
17. Report for the Twelfth COMSTECH General Assembly Meeting (2005)
18. Proceedings of International Seminar on Space Technology & Applications, Islamabad, Pakistan: 11-14 September 2006

19. Report for the Thirteenth COMSTECH General Assembly Meeting (2007)
20. Proceedings of Seminar on Remote Sensing for Water Resources Management; 27 – 29 August 2007; Damascus, Syria.
21. Proceedings of Training Workshop on Satellite Technology Applications in Communications and Remote Sensing; 5 – 8 May 2008; Lahore.
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