Brief Introduction to the Khwarizmi Science Society

The Khwarizmi Science Society (KSS) is one of Pakistan's most active science associations: organizing seminars, national workshops, public and popular lectures, sponsoring students' science projects, maintaining an online magazine "Takveen", screening video presentations and science movies, and arranging field visits and symposiums of high quality. Most of these events are announced and reported in the local press and locally published science communiqués.

Main Objectives of the KSS

The major objectives of the KSS include:

- 1. Scientific Meetings and dialogue
- 2. Encouraging students to take up careers in science
- 3. Student-scientist interaction
- 4. Popularization and public dissemination of science
- 5. Fostering collaborations between individuals and organizations
- 6. Resource sharing
- 7. Practical scientific and technological exposure
- 8. Publication of high quality scientific literature

Range of Activities

To achieve these goals, we organize different kinds of activities such as:

- 1. Public and popular lectures
- 2. Technical seminars
- 3. Video presentations and movies
- 4. Field visits
- 5. Workshops
- 6. Symposiums
- 7. Sponsoring of scientific projects and competitions
- 8. Career counselling
- 9. Media outreach and science journalism
- 10. Publications and translation
- 11. Book reviews
- 12. Public exhibits of science

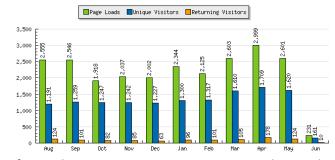
Major Strengths of the KSS

We believe that the major strengths and unique characteristics that set us apart from other science societies and organizations are:

- 1. Inter-disciplinary
- 2. Does not belong to one institution
- 3. All ages and experiences are welcome
- 4. A track record of high calibre events, the distinct number approaching 170
- 5. Mix of science and non-science (economics, psychology, sociology, philosophy)
- 6. Mix of students and Professors
- 7. Effective web presence
- 8. Grooming students in their analytical, scientific, organizational and journalistic skills
- 9. Connecting people
- 10. Technical as well as popular appeal
- 11. Public involvement
- 12. Managed by teams of students and experts
- 13. Proceedings are bi-lingual (Urdu and English maximizing outreach)
- 14. Inexpensive to become a Member!

Website

We were established in 1997. To date, we have organized around 170 events of very high caliber. A full list is provided on our website, http://www.khwarizmic.org. Our activities are unique because of the follow-through – we provide



hand-outs and detailed reports of most of our activities. This material is accessible free of charge on our dynamic website, declared as among the Top five Pakistani websites in the March 2003 issue of the Spider Magazine. Our website dates back to 1997, it is concurrent with the life of the Society. This was a time when only

a few Pakistani organizations maintained an online presence. We maintain full statistics of our web presence. Currently, we are in the process of shifting our domain to a new domain we have purchased through individual sponsorships and donations. We also have a mailing list to which about 2000 email addresses are subscribed.

Inter-disciplinarity

The KSS greatly cherishes its inter-disciplinary character. Our events range from the mathematical to the biological sciences, the intricacies of the sub-atomic world to the pristine beauty of the natural habitat, from the inner workings of a petrol engine to promise of fuel cells, from the human genome project to the advances in telecommunications. We also cover topics of imminent interest and of paramount national and social importance, such as Pakistan's nuclear programme, the cracking of the human genome and its ethical implications, and the outbreak of community diseases such as the dengue fever. Our no-boundaries philosophies even takes us into unchartered waters, commonly neglected discourses in Pakistan, such as astronomy, earth sciences and the history and philosophy of science. Our complete list of activities is a kaleidoscope illuminating the different facets of science and the scientific method that we have covered through our seminars and other events.

Over the past ten years, our events have covered the following topics:

- A Agriculture astronomy atmosphere automation automobiles
- **B** Bioinformatics biology biomedical engineering book review Botany
- C career chemical technology Chemistry communications Computational Biology computer science computers computing cosmology
- **E** <u>economics</u> <u>education</u> <u>electrical engineering</u> <u>electrical technology</u> <u>Electronics</u> <u>energy</u> <u>engineering</u> environment
- **G** geography geology
- H health history of science
- I international relations IT
- M <u>management materials science mathematics mechanical engineering Medicine metaphysics meteorology</u>
- N Nonlinear Science
- P Pakistan's Science Petroleum Engineering physics psychology
- S science fiction space science standards

Target Audience

The KSS does not belong to one educational institution. We have chapters all around Lahore and are currently in the process of expanding our reach outside Lahore. Our members and participants are students of science, economics, history, literature and religion, all sharing a common goal — the quest and never ending thirst for knowledge. We are not even confined to students and academicians; we have gained our worth amongst the general public as well.



Public Lectures – Our Main Forte

Our unique characteristic is our series of public lectures that do not assume any prior knowledge of the subjects under discussion and attract the laity. These lectures are often conducted in Urdu, maximizing comprehension and a "homely atmosphere". This helps us a long way in achieving our goal of popularizing science within the masses.

Photographs from Some of Our Events















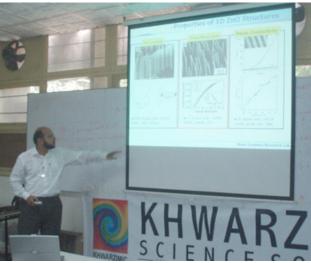




















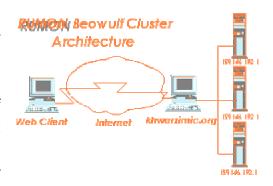
Students' Training

One of our major aims is the character building of students, by boosting their confidence levels. Our seminars and lectures are not only conducted by renowned experts, but also by students. This provides them the opportunity to share their message with their peers and helps promulgate their ideas within teachers and scientists. We personally feel that it is very important to break this communication gap between teachers and students, the experts and the novices and the KSS is duly fulfilling its role in this respect as well.



Students' Projects

Occasionally, the KSS also sponsors students' projects. For example, in 2001-1, the Society came forward and provided technical and financial support to a group of students to build a Beowulf-style cluster computer from the off-the-shelf components. The students successfully completed the project resulting in some presentations in an IEEE-sponsored national conference. Details are available on our website under http://www.khwarzimic.org/cluster/.



Effective Graphic Announcement

In order to enhance the appeal of our announcements, we use the services of volunteering graphic designers and for our major events, also seek professional help. Our announcements are distributed in a network of educational institutions inside the country, sometimes these announcements are also placed in newspapers depending on availability of funds. Urdu is used as a very common medium for the adverts, with the object of increasing the outreach.



Availability of Lecture Material and Video recordings

The KSS makes every effort in transcribing the public lectures, seminars and workshops in textual, audio or video format. This has resulted in the production of a large volume of material, presentation slides included, that is accessible free of cost from the website. The next steps aim at obtaining a video and integrated sound system that can enable digital recording of the events. Sometimes professional help is sought in the video recording, but so far, our resources have been limited to exercise this option freely. The online magazine "Takveen" is a repository of lecture material. An archive



of presentations has also grown out of our long list of events.

Participation Records

We maintain an archive of participation sheets – a record of all participants who have attended and took part in our activities. This number is now approaching several thousands. These records help us track the feedback we receive and enable us to steer our announcement and public outreach campaign. We receive immense feedback from all participants and rely on our Members and audience for continuous improvement of our activities.



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28	RIZWANA HAIDER	B.SC. (Hons) TV [. B.13.
29-	URFA JAFAR RANA	B. Sc. (Hons) I Smester (1BB)
Sr. No.	Name	Institution / Affiliation
30	Noyam-Ul-Sehar	B-SC CHONS IV Semester CIBE
31	Aguis Muklitas	M. Phil / Course for Sold State Phy
32	Kamxan W Hasan	M.Sc Physics Physics Deptt P.B
33	M. Saad Siddig.	B.Sc. (Hons.) Biochem. TV Sem
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37	MUHAMMAD ANTERD	MSC MID. PUTC LHR.
32	Muhammad Kashif	M.S.E. Chemistry PUIC . LHR.
39	Mudassar Baig	MSc Part I Chemistry PUIC
40	Kashif Jamil	B.S. (Hons) Biochem. IV semeste
91	SAMAR GLAYAT	B.S. (hons) IN semester Biochemis
42	Saleen Nuz Mirza	B Se (Hon) IBB - 4th Sem
43	Saira Riag	Ph.D. CSSP. P.U. Lahore.
44	Razia QURESHI	M.phil, essp. p. u. Lahore
46.	Sava Amore	BSc. (Hons) . IBB. The Seemes
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47	Zarfishan Shabbis	M.Sc. Chemistry Part II P.U. la
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The KSS Members and Funding

Our Members are our asset. We have opportunities for Life and Full Year Memberships. The fee are, respectively, Rs. 1000 and Rs. 250. Membership applications can be filled online as well as in person and handed over to a Society office-bearer. Currently, the Membership fee are our only major source of income, that is needed for the efficient and effective running of the very large number of events we organize and projects we have running.

We hope you will appreciate the untiring efforts we have put in towards the operation and growth of the Khwarizmi Science Society, mostly done with very meager resources, but with indomitable will and the selfless sacrifice of the Executive Committee and all the Members and well-wishers of the Society.