



**Mohammad K. Samarkandy** received his **PhD** from the Electrical Engineering Department of Stanford University, Ca., USA.

He was a *Research Assistant* at Stanford Center for Radar Astronomy, during 1976-1979, and *Research Associate* at the Communication Satellite Planning Center, Stanford CA, during 1979-1981.

His research interests include interference between Communication Satellites, Small Earth Station design, Telecommunication Planning, Remote Sensing and Satellite Teleconferencing.

Here in Riyadh, Saudi Arabia, he also worked as Technical Consultant for the *Ministry of Defense*, *Ministry of Interior*, *Technical Organization for Higher Education*, and several private companies.

## **I. Academic Qualifications:**

\* **Ph.D.** : Electrical Engineering Department, Stanford University, Stanford, California, 94305, USA (June 1981)

### **Title of Ph.D. Thesis:**

*“Technical Basis for Efficient Management of Geostationary Satellite Orbit/Spectrum”*. (Supported by the National Aeronautics and Space Administration, **NASA** through Grant NAG3-51, Stanford University)

\* **JI.Sc.** : Department of Electrical *and* Computer Engineering, University of California, Santa Barbara, California, USA (June 1975).

\* **B.Sc.** : Electrical Engineering Department, King Saud University (formerly, **University of Riyadh**), Riyadh, Saudi Arabia (1971)

## 2. Academic Activities

- \* 1987                    **Member, Steering and Scientific Committee** for the ARABSAT Symposium, King Saud University, Riyadh, Saudi Arabia.
  
- \* 1982- *Present*            **Review of Research Proposals and papers** submitted as follows to; *King Abdul Aziz City for Science and Technology* (Riyadh), *Arabian Journal for Science and Engineering* at King Fahd University of Petroleum and Minerals, Dahrhan, *Journal of Engineering & Applied Sciences*, at King Abdul Aziz University, Jeddah, *First Saudi Engineering Conference* (Jeddah, May 1983), *Second Saudi Engineering Conference* (Dhahran, Nov.1985), *ARABSAT Symposium* (Riyadh, Sept, -Oct. 1987).
  
- \* 1982 - 1983            Chairman, Cultural Committee, College of Engineering, King Saud University.
  
- \* 1984-1987            **Invited Speaker;** Ministry of Defense & Aviation Command & Generals Staff College - on Satellite Communications (Dec. 1987), and gave several lectures to the Kingdom's Telecommunication Engineers (1984&1986).
  
- \* *Nov.* 1985            **Invited Chairman** of the "Power System Planning" session at the Second National Engineering conference, King Fahd University of Petroleum and Minerals, Dhahran, Saudi Arabia (Nov. 1985).
  
- \* 1985-1987            **Participated with GOTEVT German Experts** for implementing the new academic plan, for the Colleges of Technology in the Kingdom of Saudi Arabia.
  
- \* 1986-1987            Conducted two Semester-Practical training course to graduate demonstrators, from the Institute of Telecommunications Ministry of PTT on Telecommunications and Television Broadcasting.
  
- \* 1986-1987            **Participated with GOTEVT Japanese Experts** for implementing the new academic plan, for the Institute of Electronics in the Kingdom of Saudi Arabia.
  
- \* 1982-1996  
  & 2000 - *Present*            **Staff Member** of the Electrical Engineering Department, King Saud University.

### 3. Activities within King Saud University (KSU)

- \* 1983 - 1984      **Member, KSU Security & Safety Committee.**
- \* 1983 - 1984      **Member, KSU Community Service Center and Continuing Education.**
- \* 1984              **Chairman, Technical Committee** for the acceptance of Lecture Halls and Media Center for the New KSU Campus.
- \* 1984 - 1996      **Chairman, Technical Committee** for the specification of Girls' College Electronic and Broadcasting Studios.
- \* 1987 - 1996      **Chairman, KSU - Media Center Council** (Audio & Video Distribution Center).

### 4. Media Center Activities

- \* **Placed down rules & regulations for the new “Media Center Services”** at King Saud University.
- \* Interviewed technicians and engineers (males and females) from Egypt, Tunisia, and **recruited technical manpower from Philippines for King Saud University.**
- \* Supervised the **manpower training for operation and maintenance of** Audio Visual Systems (Language Laboratories, Conference Halls, KSU Theatres, Campus CCTV, Audio & Television Production Studios, Girls' TV Studio Networks, etc.).
- \* Presented several Audio programs (English & Arabic) on Satellite applications which broadcasted through the Saudi Arabian Broadcasting Stations. Presented Five Television programs on Satellite Communications, Weather Satellites, Hurricane predictions and Remote Sensing, all broadcasted through the Kingdom's Television Network, Channel-2.
- \* Supervised the production of a series of 16-half-hour educational, scientific and Cultural television programs (entitled Bits & Pieces), Broadcasted weekly through the Kingdom's Television network, Channel-2.
- \* Supervised the production of 12 documentary films (each half hour), presenting the Student's Education, Scientific and applied researches, Girl's education, Medical Hospitals and technical training in different colleges at King Saud University, all have been broadcasted through the Kingdom's Television Network, Channel-1.

- \* Supervised the production of four documentary films; Historical City of Deraiyah, Gardens and Play Grounds in the City of Riyadh Community Service Center and Solar Power production in the Kingdom of Saudi Arabia, all have been broadcasted through the Kingdom's Television network.
- \* Interviewed by several Saudi newspapers on the subject of Satellite Communications and was the first in the Arab countries to clarify the understanding of *Direct Broadcast Satellite (DBS)*, both for public and official personnel. Also participated in a Live Conference via satellite was Dr. Farouq Al- Baz in the United States to clarify the understanding of water resource discovery in Saudi Arabia, (managed by the U.S Embassy in Riyadh).

## 5. Professional Activities

- \* Nov. '83- Mar. '84 Part-time Technical Advisor, **Ministry of Interior**, General Directorate of Communications.
- \* Aug. '83 - Feb. '85 Part-time Technical Advisor, **Ministry of Defense and Aviation** - Military Survey Department
- \* May 84 Part-time Technical Advisor, **Ministry of Finance** General Directorate of Customs Department
- \* Sept. '84 – Sept. '87 Part-time Technical Advisor, **Higher Technical Education - General Organization for Technical Education and Vocational Training (GOTEVT)**.
- \* Nov.87 - Nov. 89 **Chairman**, Kingdom of Saudi Arabia's Sub-technical Committee for specifying the need of Space Telecommunication Services and Planning for Geostationary Satellite Orbit/ Spectrum (General Committee chaired by Ministry of PTT).
- \* 1986-1987 Designed the **Closed-Circuit Surveillance Television Network** for the main library building at KSU, Diraiyah (consisting of 112 Cameras) and supervised the installation, operation and maintenance of the system.

- \* *May 9 -Dec. '96* Designed **technical planning programs** to train university personnel to carry out operation and maintenance of all audio visual equipments, such as Video & Audio networks, Language Laboratories, Electronic Systems in all Lecture Halls for Girl's Colleges for Medical Science and Humanities, Student Housing (both male and female), College of Medicine, College of Dentistry, College of Applied Medical Sciences, Libraries, other colleges and Institutes in the University. (All these facilities was being maintained by four companies, but with this particular programs, the University personnel has been able to replace them).
  
- \* *Dec. '96-Dec. '99* General Manager, "Saudi Advanced Technology Agency".
  - \* Participated in the technical design and commercial project study of *Sheraton Madina Hotel - Madina*.
  - \* Participated in the feasibility study, technical specification, contractor bedding analysis and negotiation of *White Cement Factory, Riyadh*.
  - \* Participated in the feasibility study, technical specification and negotiation with various government agencies personnel for the Commercial STPP Project - Sodium Tripolyphosphate, Jubail.
  - \* Participated in the Feasibility study of *Electrical Home Appliances Complex Project*.
  - \* Prepared a feasibility study for establishing a Mobile phone company in Tunisia.
  - \* Participated in preparing the technical study for the *Islamic Satellite Channel* via satellite, Jan 2000.
  - \* Technical advisor for different companies and some government agencies.

## 6. Research Grants

- \* **Principal Investigator** for the project, "*Investigation of the Future Expansion of the Saudi Telecommunication Network*". Among my colleagues were; Dr. S. H. Bakry, Dr. S. Al-Wakeel, the Deputy Minister of PTT, Eng'r. M.J. Mulla, (budget SR. 1,069,400, about US\$ 285,173. For a period of three years; December 1984 - January 1988) funded by King Abdul Asiz City for Science and Technology (KACST), Grant No: AT-6-55.

- \* Co-investigator in the project, "*Small Earth Station Technology Development*", with my Colleague Dr. M. Atifi, with a budget of SR. 365,000, about US\$ 97,400, for a period of three years; December 1984 - January 1988, and it was funded by the Research Center at the College of Engineering, King Saud University.
- \* While working at Stanford University in 1979, **designed, installed and operated a *Small (TVRO) Earth Station for Direct Broadcasting Satellite***, with a budget of US\$.3,400.: 1980/1981, and it was funded by King Saud University. More than 40 TV Programs were received from 7 Canadian and U S Satellites in orbit.
- \* **Main investigator** in the project, "**Technical Basis for Efficient Management of Geostationary Satellite Orbit/ Spectrum**", which is funded by the National Aeronautics and Space Administration (*NASA*), Grant No: NAG3-151, (1980/1981), Communication Satellite Planning Center, Stanford University, California, USA.

## 7. Academic Positions:

- \* *Present:* Associate Professor, Electrical Engineering Department, College of Engineering, University, Riyadh, Saudi Arabia.
- \* *Jan. '82 - Sept. '88* Assistant Professor, Electrical Engineering Department, College of Engineering, King Saud University, Riyadh, Saudi Arabia.
- \* *June 81-Jan. 82* Post Doctoral Research Affiliate, Communications Satellite Planning Center, Department of Electrical Engineering, Stanford University, Stanford, California, 94305, USA.
- \* *July 71- July 73* Teaching Assistant, in Electrical Engineering Department, College of Engineering, King Saud University, (formerly, ***University of Riyadh***), Riyadh, Saudi Arabia.

## 8. Administrative Positions:

Dr. Samarkandy is an Associate Professor in the Electrical Engineering Department of King Saud University. In addition, the President of the University has assigned him the following administrative Positions:

- \* *Dec. '87- Dec. '96* Director of Media Center: (Audio-Video Distribution Center), and Studio Supervisor at King Saud University, Riyadh, Saudi Arabia.
- \* *Sept. '84 -Dec. '96* Supervision of Girl's College Educational Studios for Human Science, in Ulaisha and Medical Science in Malaz.