



Professor Dr. Syed Arif Kamal

MS (Indiana, USA); MA (Johns Hopkins, USA); PhD; *Member*, AIAA (USA), IBRO (France)
Convener, NCRC (Math), HEC; Subject Comm. (Math), NTS; Sub-Comm. (Sch.), Educ. Comm., TIP
Member, Expert Panel (Math), National Curriculum Council, Ministry of Education, Govt. of Pakistan
Program Convener, the Early Talent Research Participation Program
Member, Karachi University Senate; Academic Council; Board of Faculty; Board of Studies
Project Director, the NGDS Pilot Project; HEC-Approved PhD Supervisor and *Ex-Chairman*

Professor, Department of Mathematics UNIVERSITY OF KARACHI

Office: Room No. G-5, Department of Mathematics, University of Karachi, University Road

Paper Mail: University of Karachi, Post Office Box 8406, Karachi 75270 (Pakistan)

Link on KU Site: <http://www.uok.edu.pk/faculties/mathematics/faculty.php#kamal>

Homepage: <http://ngds-ku.org/kamal> • *e-mail:* [kamal\(at the rate of\)ngds-ku.org](mailto:kamal(at the rate of)ngds-ku.org)

Public Profile: <http://pk.linkedin.com/pub/dr-syed-arif-kamal/12/b71/400>

Telephone: (92 21) 9926 1300-6 ext. 2293 (secretary), ext. 2380 (direct)

PUBLICATIONS

My Philosophy of Life

While there is a will there is a way

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DATE and TIME of printing must match on every page.

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Key to Institutions

Albert Einstein College
Comprehensive School
Government College
Higher Education Commission
Indiana University
Johns Hopkins University
Karachi University
Lund University
Ministry of Education
Oklahoma University
Sir Syed University

- For each item, the line containing **AUTHORSHIP(S)** mentions, in the left-hand column, name of the institution (listed, below, alphabetically), where the work was performed
- The Albert Einstein College of Medicine, Bronx, New York 10461, USA
- Government Comprehensive High School, Mirpurkhas, Sindh, Pakistan
- Government College, Hyderabad (Pakistan)
- Higher Education Commission, Regional Center, Gulberg, Lahore, Pakistan
- Indiana University, Bloomington, Indiana 47405, USA
- The Johns Hopkins University, Homewood Campus, Baltimore, Maryland 21218, USA
- University of Karachi, University Road, Karachi 75270, Pakistan
- University of Lund, Malmö General Hospital (Spinal Unit), S-21401, Malmö, Sweden
- Ministry of Education, Curriculum Wing, Sector H-9, Islamabad, Pakistan
- University of Oklahoma, Norman, Oklahoma 73019, USA
- The Sir Syed University of Engineering and Technology, University Road, Karachi 75300, Pakistan

Journal Papers 2011

Abstract
Full Text
Karachi University

- The entry [**J##**] preceding the title is the code assigned to the item listed
- **J29: Growth-and-Obesity Profiles of Children of Karachi using Box Interpolation Method**
<http://www.ngds-ku.org/pub/jourabstA.htm#J29>:
<http://www.ngds-ku.org/Papers/J29.pdf>
KAMAL SA, Jamil N, Khan SA, *International Journal of Biology and Biotechnology* **8(1)**, 2011, 87-96

This document contains information as of: December 1, 2011 (0000h GMT)

Signatures _____

<http://ngds-ku.org/kamal>

[kamal\(at the rate of\)ngds-ku.org](mailto:kamal(at the rate of)ngds-ku.org)

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- 2009**
- **J28: Concept Building in the Undergraduate Mathematics and Physics Curricula**
[http://www.ngds-ku.org/pub/jourabst.htm#J28:](http://www.ngds-ku.org/pub/jourabst.htm#J28)
<http://www.ngds-ku.org/Papers/J28.pdf>
KAMAL SA, Siddiqui KA, Naseeruddin, *Karachi University Journal of Science* **37(1&2)**, 2009, 1-6
- Abstract*
Full Text
 Karachi University
- 2005**
- **J27: A Systematic Way to Express the Equations of Straight Line in Terms of Their Direction Ratios**
[http://www.ngds-ku.org/pub/jourabst.htm#J27:](http://www.ngds-ku.org/pub/jourabst.htm#J27)
<http://www.ngds-ku.org/Papers/J27.pdf>
KAMAL SA, Naseeruddin, *Karachi University Journal of Science* **33(1&2)**, 2005, 71-72
- Abstract*
Full Text
 Karachi University
- 2004**
- **J26: An Investigation of Growth Profiles of the Pakistani Children**
[http://www.ngds-ku.org/pub/jourabst.htm#J26:](http://www.ngds-ku.org/pub/jourabst.htm#J26)
<http://www.ngds-ku.org/Papers/J26.pdf>
KAMAL SA, Firdous S, Alam SJ, *International Journal of Biology and Biotechnology* **1(4)**, 2004, 709-717
- Abstract*
Full Text
 Karachi University
- 2002**
- **J25: The Human Heart as a System of Standing Waves**
[http://www.ngds-ku.org/pub/jourabst.htm#J25:](http://www.ngds-ku.org/pub/jourabst.htm#J25)
<http://www.ngds-ku.org/Papers/J25.pdf>
KAMAL SA, Siddiqui KA, *Karachi University Journal of Science* **30(1&2)**, 2002, 55-63
- Abstract*
Full Text
 Karachi University
- 2000**
- **J24: The Sixth Paradigm of Physics**
[http://www.ngds-ku.org/pub/jourabst.htm#J24:](http://www.ngds-ku.org/pub/jourabst.htm#J24)
<http://www.ngds-ku.org/Papers/J24.pdf>
KAMAL SA, Siddiqui KA, Naseeruddin, *Karachi University Journal of Science* **28(2)**, 2000, 11-16
- Abstract*
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 Karachi University
- **J23: The Quantum-Mechanical Interpretation of Time**
[http://www.ngds-ku.org/pub/jourabst.htm#J23:](http://www.ngds-ku.org/pub/jourabst.htm#J23)
<http://www.ngds-ku.org/Papers/J23.pdf>
KAMAL SA, Naseeruddin, *Karachi University Journal of Science* **28(1)**, 2000, 95-97
- Abstract*
Full Text
 Karachi University
- 1998**
- **J22: Physics of Scoliosis Screening in School-Going Children**
[http://www.ngds-ku.org/pub/jourabst0.htm#J22:](http://www.ngds-ku.org/pub/jourabst0.htm#J22)
<http://www.ngds-ku.org/Papers/J22.pdf>
KAMAL SA, Naseeruddin, Wasim M, Firdous S, *Karachi University Journal of Science* **26(1)**, 1998, 5-12
- Abstract*
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 Karachi University
- **J21: Accuracy and Precision of Moiré Fringe Topography System**
[http://www.ngds-ku.org/pub/jourabst0.htm#J21:](http://www.ngds-ku.org/pub/jourabst0.htm#J21)
<http://www.ngds-ku.org/Papers/J21.pdf>
 Naseeruddin, **KAMAL SA**, Firdous S, *Journal of Natural Sciences and Mathematics* **38 (1&2)**, 1998, 157-166
- Abstract*
Full Text
 Karachi University
- 1997**
- **J20: EEG in Weightlessness: A Theoretical Estimate**
[http://www.ngds-ku.org/pub/jourabst0.htm#J20:](http://www.ngds-ku.org/pub/jourabst0.htm#J20)
<http://www.ngds-ku.org/Papers/J20.pdf>
 Ahmed SN, **KAMAL SA**, Siddiqui KA, Husain SA, Naeem M, *Karachi University Journal of Science* **25(1)**, 1997, 19-24 — corresponding author
- Abstract*
Full Text
 Karachi University
- **J19: The Covariant-Generalized-Coupling Model of Global-Electrocortical Activity**
[http://www.ngds-ku.org/pub/jourabst0.htm#J19:](http://www.ngds-ku.org/pub/jourabst0.htm#J19)
<http://www.ngds-ku.org/Papers/J19.pdf>
KAMAL SA, Siddiqui KA, *Karachi University Journal of Science* **25(1)**, 1997, 29-39
- Abstract*
Full Text
 Karachi University

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- 1996**
Abstract
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 Karachi University
- **J18: A 3-D-Static Model of the Human Spinal Column**
[http://www.ngds-ku.org/pub/jourabst0.htm#J18:](http://www.ngds-ku.org/pub/jourabst0.htm#J18)
<http://www.ngds-ku.org/Papers/J18.pdf>
KAMAL SA, *Karachi University Journal of Science* **24(1)**, 1996, 29-34
 - **J17: Combination of Moiré Contours and Edge-Based Algorithm to Study Motion in the Sagittal Plane**
[http://www.ngds-ku.org/pub/jourabst0.htm#J17:](http://www.ngds-ku.org/pub/jourabst0.htm#J17)
<http://www.ngds-ku.org/Papers/J17.pdf>
KAMAL SA, *Karachi University Journal of Science* **24(2)**, 1996, 53-60
 - **J16: Gait Analysis Using Moiré Fringe Topography and Rasterstereography (Simultaneous Recording)**
[http://www.ngds-ku.org/pub/jourabst0.htm#J16:](http://www.ngds-ku.org/pub/jourabst0.htm#J16)
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KAMAL SA, Choudhry AS, Siddiqui YA, *Karachi University Journal of Science* **24(2)**, 1996, 7-18
- Abstract*
Full Text
 Karachi University
- 1994**
Abstract
Full Text
 Lund University
- **J15: A Study to Test the Reproducibility of Moiré Topographs**
[http://www.ngds-ku.org/pub/jourabst0.htm#J15:](http://www.ngds-ku.org/pub/jourabst0.htm#J15)
<http://www.ngds-ku.org/Papers/J15.pdf>
KAMAL SA, Benoni G, Willner S, *Karachi University Journal of Science* **22(1&2)**, 1994, 67-74
- 1993**
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- **J14: Group Structure of a Covariant Model of Global-Electrocortical Activity**
[http://www.ngds-ku.org/pub/jourabst0.htm#J14:](http://www.ngds-ku.org/pub/jourabst0.htm#J14)
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 Siddiqui KA, **KAMAL SA**, Husain SA, Khan NU, *Karachi University Journal of Science* **21(1&2)**, 1993, 35-38
- 1992**
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- **J13: Effects of Weak Electromagnetic Fields on Global-Electrocortical Activity**
[http://www.ngds-ku.org/pub/jourabst0.htm#J13:](http://www.ngds-ku.org/pub/jourabst0.htm#J13)
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KAMAL SA, Siddiqui KA, Husain SA, Naeem M, Khan NU, *Journal of Biological Physics* **18**, 1992, 261-269
 - **J12: Effects of Weak Magnetic Fields on Global-Electrocortical Activity**
[http://www.ngds-ku.org/pub/jourabst0.htm#J12:](http://www.ngds-ku.org/pub/jourabst0.htm#J12)
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KAMAL SA, Siddiqui KA, Husain SA, *Karachi University Journal of Science* **20(1&2)**, 1992, 31-35
- Abstract*
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- 1990**
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- **J11: A Mathematical Model to Explain the Effects of Magnetic Field on Scale Formation**
[http://www.ngds-ku.org/pub/jourabst0.htm#J11:](http://www.ngds-ku.org/pub/jourabst0.htm#J11)
<http://www.ngds-ku.org/Papers/J11.pdf>
KAMAL SA, *Karachi University Journal of Science* **18(1&2)**, 1990, 1-9

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- 1989**
Abstract
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 Karachi University
- **J10: Behavior of Massive Particles Near the Velocity of Light**
[http://www.ngds-ku.org/pub/jourabst1.htm#J10:](http://www.ngds-ku.org/pub/jourabst1.htm#J10)
<http://www.ngds-ku.org/Papers/J10.pdf>
KAMAL SA, Husain SA, Karachi University Journal of Science **17(1&2)**, 1989, 111-120
 - **J09: Basic Requirements to Train a Physicist**
[http://www.ngds-ku.org/pub/jourabst1.htm#J09:](http://www.ngds-ku.org/pub/jourabst1.htm#J09)
<http://www.ngds-ku.org/Papers/J09.pdf>
KAMAL SA, Siddiqui KA, Physics Education (India), April-June 1989, pp 53-61
 - **J08: Spacetime Representation of Global-Electrocortical Activity**
[http://www.ngds-ku.org/pub/jourabst1.htm#J08:](http://www.ngds-ku.org/pub/jourabst1.htm#J08)
<http://www.ngds-ku.org/Papers/J08.pdf>
KAMAL SA, Siddiqui KA, Husain SA, Biological Cybernetics **60**, 1989, 307-309
 - **J07: A Dimensionless-Reciprocal Lattice**
[http://www.ngds-ku.org/pub/jourabst1.htm#J07:](http://www.ngds-ku.org/pub/jourabst1.htm#J07)
<http://www.ngds-ku.org/Papers/J07.pdf>
KAMAL SA, Husain SA, Karachi University Journal of Science **16(1&2)**, 1988, 23-27
 - **J06: The Direction of Qibla (Makka)**
[http://www.ngds-ku.org/pub/jourabst1.htm#J06:](http://www.ngds-ku.org/pub/jourabst1.htm#J06)
<http://www.ngds-ku.org/Papers/J06.pdf>
KAMAL SA, Science and Technology in the Muslim World **5(3)**, 1987, 131-134
 - **J05: Relationship of Anthropometric Measurements Taken on Clothing to Those Taken on Body**
[http://www.ngds-ku.org/pub/jourabst1.htm#J05:](http://www.ngds-ku.org/pub/jourabst1.htm#J05)
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 - **J04: Measurement of Angle of Spinal Curvature by Moiré Topographs**
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<http://www.ngds-ku.org/Papers/J04.pdf>
KAMAL SA, Journal of Islamic Medical Association (USA) **14(4)**, 1982, 145-149
 - **J03: Determinant of a General Tensor**
[http://www.ngds-ku.org/pub/jourabst1.htm#J03:](http://www.ngds-ku.org/pub/jourabst1.htm#J03)
<http://www.ngds-ku.org/Papers/J03.pdf>
KAMAL SA, Matrix and Tensor Quarterly (UK) **31(3)**, 1981, 64-66; abstract published in *Mathematical Reviews* **82j**, October 1982, 15025 (15: Linear and Multilinear Algebra: Matrix Theory), published by the American Mathematical Society
 - **J02: Extended Symmetries in Special Theory of Relativity**
[http://ngds-ku.org/pub/jourabst1.htm#J02:](http://ngds-ku.org/pub/jourabst1.htm#J02)
<http://www.ngds-ku.org/Papers/J02.pdf>
KAMAL SA, Chinese Journal of Physics **19(4)**, 1981, 87-91
 - **J01: Physical Significance and Properties of Relativistic-Effective-Mass Operator**
[http://www.ngds-ku.org/pub/jourabst1.htm#J01:](http://www.ngds-ku.org/pub/jourabst1.htm#J01)
<http://www.ngds-ku.org/Papers/J01.pdf>
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- 1988**
Abstract
Full Text
 Karachi University
- 1987**
Abstract
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 Karachi University
- 1986**
Abstract
Full Text
 Johns Hopkins University
- 1982**
Abstract
Full Text
 Oklahoma University
- 1981**
Abstract
Full Text
 Indiana University
- 1980**
Abstract
Full Text
 Karachi University

This document contains information as of: December 1, 2011 (0000h GMT)

- Conference Papers**
- 2011**
- Abstract*
Karachi University
- The entry [C##] preceding the title is the code assigned to this item:
 - **C87: 3-D-Optical imaging in Diabetic-Foot Care of Children**
[http://www.ngds-ku.org/pub/confabstA.htm#C87:](http://www.ngds-ku.org/pub/confabstA.htm#C87)
KAMAL SA, *Symposium on Diabetic Foot Care*, Department of Orthopedic Surgery, Jinnah Postgraduate Medical Center, Najmuddin Auditorium, JPMC, Karachi, 2011, p 1
 - **C86: Curbing Corruption in Pre-University Education**
[http://www.ngds-ku.org/pub/confabstA.htm#C86:](http://www.ngds-ku.org/pub/confabstA.htm#C86)
KAMAL SA, *Seminar on Curbing Corruption in the Education Sector*, the Education Committee, Transparency International Pakistan, Ambassador III, Hotel Marriott, Karachi, 2011, p 1
 - **C85: Anthromathematics: A New Branch of Mathematics**
[http://www.ngds-ku.org/pub/confabstA.htm#C85:](http://www.ngds-ku.org/pub/confabstA.htm#C85)
KAMAL SA, *the Sixth Symposium on Computational Complexities, Innovations and Solutions (CCIS 2011)*, COMSATS Institute of Information Technology, Abbotabad, KP, Pakistan, 2011, abstract # 1, pp 13, 14 (keynote lecture)
 - **C84: Intelligent Ledger Balance using Theory of Matrices**
[http://www.ngds-ku.org/pub/confabstA.htm#C84:](http://www.ngds-ku.org/pub/confabstA.htm#C84)
KAMAL SA, *the Sixth Symposium on Computational Complexities, Innovations and Solutions (CCIS 2011)*, COMSATS Institute of Information Technology, Abbotabad, KP, Pakistan, 2011, abstract # 2, pp 14, 15 (the Islamuddin memorial lecture)—nominated by Vice Chancellor, University of Karachi
 - **C83: The Fourth Law of Thermodynamics**
[http://www.ngds-ku.org/pub/confabstA.htm#C83:](http://www.ngds-ku.org/pub/confabstA.htm#C83)
<http://www.ngds-ku.org/Papers/C83.pdf>
KAMAL SA, *the Pakistan Institute of Physics Conference (PIPC 2011)*, University of Engineering and Technology, Lahore, Pakistan, 2011, paper # PIPC-11-25, p 4 (the Salim Ahmed memorial lecture) — nominated by Vice Chancellor, University of Karachi
- Abstract*
Karachi University
- Abstract*
Full Text
Karachi University
- 2010**
- Abstract*
Karachi University
- **C82: Generalization of Principle of Equivalence**
[http://www.ngds-ku.org/pub/confabstA.htm#C82:](http://www.ngds-ku.org/pub/confabstA.htm#C82)
KAMAL SA, *the Fifth Symposium on Computational Complexities, Innovations and Solutions (CCIS 2010)*, COMSATS Institute of Information Technology, Abbotabad, KP, Pakistan, 2010, abstract # 2, p 11 (Prof. Dr. Q. K. Ghorri memorial lecture)—nominated by Vice Chancellor, University of Karachi
 - **C81: An Airport-Passenger-Screening System based on Emitted IR and Thermal Radiation**
[http://www.ngds-ku.org/pub/confabstA.htm#C81:](http://www.ngds-ku.org/pub/confabstA.htm#C81)
KAMAL SA, *the Fifth Symposium on Computational Complexities, Innovations and Solutions (CCIS 2010)*, COMSATS Institute of Information Technology, Abbotabad, KP, Pakistan, 2010, abstract # 24, p 21
 - **C80: Air-Spacecraft of the Third Millennium**
[http://www.ngds-ku.org/pub/confabstA.htm#C80:](http://www.ngds-ku.org/pub/confabstA.htm#C80)
KAMAL SA, *the Fifth Symposium on Computational Complexities, Innovations and Solutions (CCIS 2010)*, COMSATS Institute of Information Technology, Abbotabad, KP, Pakistan, 2010, abstract # 25, p 21
- Abstract*
Karachi University
- Abstract*
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- 2010**
(continued)
Abstract
Karachi University
- **C79: Mathematics in the Life Sciences**
This lecture took height and weight measurements to 2-decimal place accuracies
<http://www.ngds-ku.org/pub/confabstA.htm#C79>:
KAMAL SA, *the First National Conference on Mathematical Sciences Golden Jubilee Celebration*, Department of Mathematics, University of Karachi, 2010, Abstract # 10, p 19 (the Syed Firdous memorial lecture)
 - **C78: A Minkowski-Type Metric for Curved Spacetime**
Suggested ways to make general relativity and quantum mechanics compatible
<http://www.ngds-ku.org/pub/confabstA.htm#C78>:
KAMAL SA, *Conference on General Relativity and Gravitation*, Department of Mathematics, University of the Punjab, Lahore, Pakistan, 2010, abstract# 15, p 12 (Prof. Dr. Khursheed Alam Khan memorial lecture)—nominated by Vice Chancellor, University of Karachi
- Abstract
Karachi University
- 2009**
Abstract
Karachi University
- **C77: Mathematics of Experimentation**
<http://www.ngds-ku.org/pub/confabst.htm#C77>:
KAMAL SA, *National Conference on Physics and the World of Today*, in memory of Prof. Dr. Muhammed Rafi and Prof. Dr. Muhammed Razi Hussain, Department of Physics, University of Karachi, 2009, abstract # 1, pp 9-10 (Prof. Dr. Muhammed Rafi and Prof. Dr. Muhammed Razi Hussain memorial lecture)
 - **C76: Biomedical Applications of 3-D Optical Imaging and Image Processing**
<http://www.ngds-ku.org/pub/confabst.htm#C76>:
KAMAL SA, *the Thirty-Fourth International Nathiagali Summer College on Physics and Contemporary Needs (INSC 2009)*, Activity III: Biophotonics, Photodynamics and Microscopy, National Center for Physics, Islamabad, Pakistan, 2009
 - **C75: Avoiding Infinities from the Lorentz and the Poincaré Transformations**
<http://www.ngds-ku.org/pub/confabst.htm#C75>:
KAMAL SA, *the Fourth Symposium on Computational Complexities, Innovations and Solutions (CCIS 2009)*, COMSATS Institute of Information Technology, Abbotabad, KP, Pakistan, 2009, p 16 (invited paper)—nominated by Vice Chancellor, University of Karachi
 - **C74: Gauss's Law: Choice of the Gaussian Surface and Form of the Electric-Field Vector**
<http://www.ngds-ku.org/pub/confabst.htm#C74>:
KAMAL SA, *Workshop on Physics*, Government College, Hyderabad, Sindh, Pakistan, 2009 (invited paper)
 - **C73: The Integrated Educational System: A Pre-University Educational System for the Third Millennium**
<http://www.ngds-ku.org/Pub/confabst.htm#C73>:
KAMAL SA, *the Sindh Educational Conference*, the Jamia Millia Government College of Education, Karachi, Pakistan, 2009, p 1 (keynote lecture)
- Abstract
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- Abstract
Karachi University
- Abstract
Full Text
Karachi University
- Abstract
Karachi University
- 2008**
- **C72: The Multi-Stage Lambert Scheme for Steering a Satellite-Launch Vehicle**
<http://www.ngds-ku.org/pub/confabst.htm#C72>:
<http://www.ngds-ku.org/Papers/C72.pdf>
KAMAL SA, *Proceedings of the Twelfth IEEE International Multitopic Conference (IEEE INMIC 2008)*, Edited by Anis MK, Khan MK, Zaidi SJH, Bahria University, Karachi, Pakistan, 2008, pp 294-300 (invited paper)
 - **C71: Role of Mathematics in the Sports Sciences and Technologies**
<http://www.ngds-ku.org/pub/confabst.htm#C71>:
KAMAL SA, *the Thirty-Fifth All Pakistan Science Conference*, University of Karachi, Karachi, Pakistan, 2008, abstract # 72; *Karachi University Journal of Science* **36(1&2)**, 2008, 35

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- 2008**
(continued)
Abstract
Full Text
Karachi University
- **C70: From Mathematics to Technology: A Bridge through Physics and Engineering**
[http://www.ngds-ku.org/pub/confabst.htm#C70:](http://www.ngds-ku.org/pub/confabst.htm#C70)
<http://www.ngds-ku.org/Papers/C70.pdf>
KAMAL SA, *Proceedings of the International Conference on Physics and the World of Today*, Edited by Jafri MA, Naqvi SM, Department of Physics, University of Karachi, Karachi, Pakistan, 2008, pp 32-39 (invited paper)
 - **C69: Role of Moiré Fringe Topography and Rasterstereography in the Management of Back Pain**
[http://www.ngds-ku.org/pub/confabst.htm#C69:](http://www.ngds-ku.org/pub/confabst.htm#C69)
KAMAL SA, *the First National Conference on Headache and Back Pain*, Session III, Karachi, 2008
 - **C68: Pattern Recognition using Moiré Fringe Topography and Rasterstereography**
[http://www.ngds-ku.org/pub/confabst.htm#C68:](http://www.ngds-ku.org/pub/confabst.htm#C68)
<http://www.ngds-ku.org/Papers/C68.pdf>
KAMAL SA, *Proceedings of the International Symposium on Biometrics and Security Technologies (IEEE ISBAST 2008)*, Bahria University, Islamabad, Pakistan, 2008, pp 1-7 (invited paper)
- Abstract
Karachi University
- Abstract
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- 2006**
Abstract
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Karachi University
- **C67: Incorporating Cross-Range Error in the Lambert Scheme**
[http://www.ngds-ku.org/pub/confabst.htm#C67:](http://www.ngds-ku.org/pub/confabst.htm#C67)
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 - **C66: The Multi-Stage-Q System and the Inverse-Q System for Possible Application in Satellite-Launch Vehicle (SLV)**
[http://www.ngds-ku.org/pub/confabst.htm#C66:](http://www.ngds-ku.org/pub/confabst.htm#C66)
<http://www.ngds-ku.org/Papers/C66.pdf>
KAMAL SA, Mirza A, *Proceedings of the Fourth International Bhurban Conference on Applied Sciences and Technologies (IBCAST 2005)*, Volume 3, Control and Simulation, Edited by Hussain SI, Munir A, Kayani J, Samar R, Khan MA, National Center For Physics, Bhurban, KP, Pakistan, 2006, pp 27-33 — nominated by Vice Chancellor, University of Karachi
- Abstract
Full Text
Karachi University
- 2005**
Abstract
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