CURRICULUM VITAE

Michael Jeffrey Kahn

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KEYNOTES

Professor Michael Kahn is a social entrepreneur and policy analyst across the field of innovation. He has maintained a lifelong commitment to development – of people, systems and self. To meet this goal he has served as advisor to the Ministers of Education, and Science and Technology, was Chief Director (Informatics) in the Gauteng Government, Acting Director of the Centre for Education Policy Development, Professor of Science Education in Botswana and South Africa, and an Executive Director of the Human Sciences Research Council. He serves as Extraordinary Professor in the School of Government of the University of the Western Cape, where he conducts research into the Mobility of the Highly Skilled, and is also Extraordinary Professor in the Centre for Research on Evaluation, Science and Technology at Stellenbosch University, and a member of its DST-NRF Centre of Excellence in Scientometrics and Science Policy.

Michael is skilled in policy analysis, strategic planning, measurement, monitoring and evaluation, foresight and facilitation. His academic qualifications include a PhD in Theoretical Physics (Imperial College, London) and MA in Education Policy, Planning and Management (University of London). He consults to governments, multilateral agencies and the donor community.

Over 1977 to 1990 he contributed to science and mathematics education in Botswana initiating many educational innovations, including the conversion of humanities teachers to become junior high school science teachers, and a BEd degree programme to develop nursing college tutors. His former students now occupy leading positions in public life in Botswana.

This period saw him join the African National Congress, head the photographic section of its associated Medu Arts Ensemble, and Coordinate the seminal International Exhibition and Symposium on Culture for Resistance in June 1982.

On returning from exile to South Africa, he led the science and mathematics section of the *National Education Policy Initiative*, contributed to the *ANC Policy on Education and Training*,

and designed *SYSTEM*, the national 'second chance' science and mathematics initiative for the Department of Education. He later developed the nationwide 500 *Dinaledi* Schools for the Department of Education, and subsequently authored the 2001 *ICT in Education Strategy*.

In 1996 Michael was privileged to author the seminal White Paper on Arts and Culture.

His social entrepreneurial activities include creating *Spider's Place* with the Handspring Puppet Company, a groundbreaking and award-winning comic and TV package to promote scientific literacy; the joint conceptualization of *The Teacher*, a newspaper for educators; conceptualizing the 1998 book *In the Footsteps of Mandela*; and designing and project managing a web-based greetings system in support of President Mandela's 80th birthday celebrations also in 1998.

Since 1990 Michael he contributed to South Africa's innovation policy, coauthoring the ANC Policy on Science and Technology, working on the Green and White Papers on Science and Technology, leading and designing the feasibility stage of the National Research and Technology Foresight study, participating in its ICT Panel, and later writing the Foresight Synthesis Report.

In 2002 he founded the Centre for Science, Technology and Innovation Indicators (CeSTII) at the Human Sciences Research Council that was responsible for South Africa's official R&D and Innovation surveys. Other contributions to innovation policy include co-designing the *Performance Measurement System* for the Science Councils, the seminal study on the mobility of the highly skilled - *Flight of the Flamingoes*, and co-authorship of the 2012 *Report of the Ministerial Review Committee on the STI Landscape*.

His clients have included the Department of Science and Technology, The Presidency, National Planning Commission, Academy of Science of South Africa, the World Bank, UNESCO, the Inter-American Development Bank, African Development Bank, the International Social Science Council, the International Gas Union, European Science Foundation, Finland Ministry of Foreign Affairs, IDRC, European Commission, Ramboll (Denmark), Deloitte Consulting, NIRAS (Finland), Innovos (Argentina), Qatar Statistics Authority, Mozambique Ministry of Science and Technology, UNESCO Institute for Statistics, and African Union/ NEPAD S&T initiative. He has also advised the governments of Ethiopia, Mozambique, Qatar, and Zimbabwe.

Michael then played the lead role in the development and authorship of the 2013 Annex to the OECD Frascati Manual on the measurement of R&D in developing countries. His most recent assignments were the Performance Assessment of the South African NSI, 1996-2016, and the Status of STI in Africa for the STI 2018 Conference of the African Development Bank, held in Cairo, 10-12 February 2018. Professor Kahn was lead researcher/writer for the 2012 Ministerial Review Committee on the Science, Technology and Innovation System, and most recently provided analysis and critique for the new White Paper on STI.

Professor Kahn is an elected member of the Academy of Science of South Africa, was Vice Chairperson of the Board of the Agriculture Research Council, serves on the advisory board of the journal *Research Policy*, is on the boards of the Chief Albert and Nokukhanya Luthuli Peace and Development Institute, and the D G Murray Trust. He is a frequent keynote speaker at international conferences, and continues to publish in the academic literature.

EDUCATION

MA (Ed) in Policy, Planning and Management [with distinction] University of London, 1988

PhD (Theoretical Physics), Imperial College, London, 1975

DIC: Diploma of Membership of Imperial College, London, 1971

BSc (Hons) Physics and Applied Mathematics [cum laude], University of Cape Town, 1969

SHORT COURSES

Finance for Non Financial Managers, Graduate School of Business, University of Cape Town 2005

Project Management, Whitehead Inc, Johannesburg

1998

Executive Course: Developing Information System Strategy, Cranfield Institute of Technology,

1997

Executive Course: Training the Trainers, Chelsea College, University of London

1985

CAREER PROGRESSION

Extraordinary Professor, University of the Western Cape

2015 -

Director: Unit for research on the Mobility of the Highly Skilled (MOTHS); Postgraduate supervision

Extraordinary Professor, University of Stellenbosch

2012 -

Research in the field of Innovation Studies; Doctoral supervision; Member of the DST/NRF Centre of Excellence in Scientometrics and Science Policy

Extraordinary Professor, Tshwane University of Technology, Pretoria.

2009-2011

Research in the field of Innovation Studies

Honorary Research Fellow, University of Stellenbosch

2009-2011

Research in the field of Innovation Studies

Research Fellow, National Research Foundation, Pretoria.

2009-2011

Development of a position paper on higher education performance measurement; evaluation of the South Africa-Norway S&T Bilateral.

Independent Adviser

2008 -

Strategic planning, measurement, monitoring and evaluation, facilitation, and academic research.

Executive Director, Knowledge Systems, Human Sciences Research Council, Pretoria. 2002-2008

Leadership and management of forty staff to implement national surveys, conduct self initiated and client-driven 'social science research that makes a difference.'

Adjunct Professor, Faculty of Science, University of Cape Town.

2002-2005

Provision of strategic advice to the Dean

Special Adviser to the Minister of Science and Technology

2002 - 2003

General policy advice and speech writing

Adviser to the Minister of Education

1999-2002

Development of a strategy for science and mathematics education; Development of a strategy for ICT in education; policy advice; speech writing

Professor of Science, Mathematics and Technology Education Faculty of Science, University of Cape Town

1999-2002

Developed and lead a novel initial teacher qualification, the four-year BSc(Ed). Designed unique courses, recruited students and built an academic staff.

Management Consulting

1998-1999

Strategic planning, policy analysis, monitoring and evaluation, organizational development

Chief Director, Corporate Informatics, Gauteng Provincial Government 1996-1998

Lead the Corporate Informatics division to provide WAN connectivity for the Gauteng Provincial Government. Managed eighty staff split across two sites; ensured continuity of services, upgrades and future planning, and disaster recovery.

Adviser to the Director-General, Department of Arts, Culture, Science and Technology, 1995-1996

Advised the Director-General on organizational design; speechwriter to the Minister; design of intervention projects including the Foresight Study, White Paper on Arts and Culture, White Paper on Science and Technology.

Analyst and Acting Director, Centre for Education Policy Development, Johannesburg 1993-1996

Development of policy for Science and Mathematics education; Development of the Intervention Plan for Further Education; Development of the post-school redress programme: Students and Youth into Science, Technology, Engineering and Mathematics. Redesign of the Centre post 1994.

Consultant, Commission of the European Communities, Pretoria 1993

Conduct a sector study on Science and Mathematics Education

Deputy Director, Science Education Project, Johannesburg 1990-1992

Second in command of a forty-person nationwide NGO dedicated to innovative low-cost support for school science teaching.

Associate Professor in Mathematics and Science Education, University of Botswana 1977-1990

Head of Department of thirty staff offering a range of Certificate, Diploma and Degree courses for initial and in-service education of teachers. Curriculum development with the Ministry of Education. Masters supervision; project supervision.

Honorary Research Fellow, Kings College, London, 1988

Research on microcomputers in science education.

Photographer, North London News, London 1976-1977 Photographer on assignment across North London

Certified Teacher, Inner **London Education Authority**, London 1975-1976

Teacher of Mathematics and Physics at "O" and "A" level.

COUNTRY EXPERIENCE

Research consultancy:

Botswana; Brazil; Colombia; Ethiopia; European Union; France; Lesotho; Malawi; Mauritius; Mozambique; Namibia; Qatar; South Africa; Swaziland; Tanzania; Zambia; Zimbabwe;

Country studies:

Botswana; Brazil; Canada; Ethiopia; European Union; Malawi: Mauritius; Mozambique; Namibia; Qatar; Russian Federation; Southern African Development Community; Tanzania; United Kingdom; United States; Zimbabwe; Zambia

Meetings, seminars and conferences:

Argentina; Australia; Belgium; Brazil; Canada; China; Denmark; Egypt; Equatorial Guinea; Ethiopia; Finland; France; Germany; Ghana; India; Israel; Italy; Japan; Malaysia, Mexico; Netherlands; Qatar; Panama; Peru; Portugal; Qatar; Romania; Russian Federation; Senegal; Spain; Switzerland; Tanzania; Turkey; United Kingdom; United States; Vietnam.

PUBLICATIONS

Peer-reviewed Journals

Education

- 1. Kahn, M J (1979) Capacitance by Reed Switch School Science Review Vol 60, 542.
- 2.- (1979) Young's Modulus of a Hacksaw Blade **School Science Review** Vol 60, 554.
- 3- (1980) Monochrome Transparency Processing School Science Review Vol 60, 792.
- 4- (1984) Relevance in Science Teacher Education, Boleswa Education Research Journal Vol 2, 45-63
- 5. (1986) Bridging the Two Cultures **Research in Education** No 36, 39 46.
- 6 (1986) Use of a Syringe for an Instant Vacuum School Science Review Vol 68, 115.
- 7- (1987) Capacitors and Energy losses, **Physics Education** Vol 23, 36-37.
- 8- (1989) Teaching Physics in a Technological Context: **School Science Review** Vol 71, No 254, 9-13.
- 9.- (1989) Educational Reform and the Dependency Paradigm: some Considerations from Botswana. **Compare**, Vol 19, No.2, 83-93.
- 10.- (1989) Issues in Science Education and National Development **Pula Journal of African Studies**, Vol 6 No 2, 38-47.
- 11.- (1990) Teachers, Tutors and Inspectors: Views Toward Pre-Service Teacher Education **Educational Review**, Vol 42, No 1, 3-12.
- 12.- (1990) Some Questions Concerning the Standard and Role of External Examinations **Studies in Educational Evaluation,** Vol 16, 513-527.
- 13.- (1990) In the Name of Equity: Curriculum Reform in Botswana **Geneva-Africa**, Vol 28, No 2, 63-76.
- 14.- (1990) Paradigm lost: The Importance of Practical Work in School Science from a Developing Country Perspective **Studies in Science Education**, Vol 18, 127-136.

- 15- (1990) Scientific Literacy in Developing Countries **Compare**, Vol 20 No 2, 155-162.
- 16.- (1991) Meeting the Shortage of Science Teachers: an Innovation Reviewed **Research in Education** Vol 46, 17 23.
- 17.- (1991) Attitudes of Botswana Secondary School Pupils toward Agriculture **International Journal of Educational Development** Vol 11, No 3, 201 208.
- 18. Kahn, M. J. and Levy, S.(1993) African Lion or African Mouse: the role of technology education in developing industry **Innes Labour Brief** Vol 4, No 4.
- 19. Kahn, M. J. and Levy, S.(1993) Guidelines for private sector spending on mathematics and science education, **Innes Labour Brief** Vol 4, No 4.
- 20. Kahn, M. J. and Rollnick, M.R.(1993) Science Education in the New South Africa: Visions and Reflections, International Journal of Science Education, Vol 15, No 3, 261-272.
- 21. Kahn, M. J, Volmink, J. and Kibi, M. (1995) 'A Comprehensive Solution to the Cycle of Mediocrity in Science and Mathematics Education', South African Journal of Science Vol 91, Sept.
- 22. Kahn, M. J. (1995) Some Policy, Process and Implementation Issues Facing Science Education and Training in post-Apartheid South Africa International Journal of Science Education. Vol 17, No 4, 441-452.
- 23.- (1996) Some Research Issues and Findings Concerning Funding Policy for Science and Mathematics Education in South Africa (1996). **International Journal of Science Education**, Vol 18, No 5, 511-523.
- 24.- (1996) 'Five years on: a case study of education policy implementation in South Africa', International **Journal of Educational Development** Vol 16 No 3, 281-289.
- 25.- (2001) 'Changing science and mathematics achievement: Reflections on policy and planning' **Perspectives in Education** Vol 19 No 3, 169-176.
- 26.- (2004) 'For whom the school bell tolls: disparities in performance in senior certificate mathematics and physical science' **Perspectives in Education** Vol 22 No 1, 149-156.
- 27. (2005) 'A Class Act: Mathematics as filter of equity in South Africa's schools **Perspectives in Education** Vol 23, No 3, 139-148.

Research and Innovation Policy

28. Kahn, M.J. and Swanborough, R.(1999) 'IT in Public Sector Reform' University of Manchester Institute of Public and Development www.sed.manchester.ac.uk/idpm/publications/wp/igov/

- 29. Kahn, M. J. and Asmal, A.K. (2000) 'The Knowledge Economy: Fact or Fiction?' **South African Journal of Business Management** Vol 34, No 4, 131-136.
- 30. Kahn, M. J. and Reddy, B.D. (2001) 'Science and Technology in South Africa: Regional Innovation Hub or Passive Consumer?' **Daedalus** Vol 130, No 1, 205-234.
- 31. Kahn, M. J. (2001) 'Developing mechanisms to promote South-South Research in Science and Technology: the case of the Southern African development Community' **African Sociological Review** Vol 5, No 1, 17-35.
- 32.- (2002) 'Charting a course for South Africa's science and technology: who is the pilot?'

 New Agenda Vol 5, No 1, 96-112
- 33. Blankley, W. and Kahn, M.J. (2004) 'R&D in SA' **South African Journal of Science** Vol 100, 9-11.
- 34. Kahn, M. J. and Gering, M.Z. (2004) 'Information for Decision Making in Government' **Administratio Publica** Vol 12, No 2, 102-118.
- 35. Kahn, M.J.(2004) 'The Human Genome: Access, Frameworks, Resources in Curriculum Action (AFRICA)' **Journal of Genomics and African Society** Vol 1, No 1, 13-24.
- 36. Kahn, M.J. and Blankley, W. (2005) 'The changing face of South Africa's national system of innovation, 1991–2001 **Industry and Higher Education** April 2005, 121-130.
- 37. Blankley, W. and Kahn, M.J. (2005) 'The History of Research and Experimental Development (R&D) measurement in South Africa and some current trends' **S A Journal of Science** Vol 101 No 3/4, March/April, 151-156.
- 38. Kahn, M. J. (2006) 'The South African national system of innovation after Apartheid: from constructed crisis to constructed advantage?' **Science and Public Policy** Vol 33, No 2, 125-136.
- 39. (2007) Internationalization of Research and Development: Where does South Africa stand? **South African Journal of Science** Vol 103, 7-12.
- 40. Kahn, M.J., Vlotman, N., Steyn, C., and Van der Schyff, M. (2007) 'Innovation Policy and Higher Education in South Africa: Addressing the Challenge.' **South African Review of Sociology**. Vol 38, No 2, 176-190.
- 41. Kahn, M.J. and Gastrow, M. (2008) 'Pharmacologically active: clinical trials and the pharmaceutical industry.' **South African Medical Journal** Vol 95, No 3, 630-632.
- 42. Steyn, C. and Kahn, M. J. (2008) 'Towards the Development of a Knowledge Management Practices Survey for Application in Knowledge Intensive Organisations' **South African Journal of Business Management.** Vol 39, No 1, 45-53.

- 43. Kahn, M. J.(2008) 'Africa's Plan of Action for Science and Technology and Indicators: South African experience', **African Statistical Journal** Vol 6, 163-176.
- 44. (2008) 'Foresight in South Africa: Estimating results through the prism of time,' **The Foresight** (in Russian) Vol 2, 56-65.
- 45. Kahn, M.J. and Hounwanou, L. (2008) 'Research and Development in the Services Sector of an Emerging Economy: the case of South Africa' **Science and Public Policy** Vol 35, No 7, 515-526.
- 46. Kahn, M. J. (2009) 'Innovation strategy of South Africa under transition: technology in the time of cholera.' **The Foresight** (in Russian) Issue 2, 4-14.
- 47. Liebenberg, F., Philip G. Pardey and Michael Kahn (2010). South African Agricultural Research and Development: A Century of Change. Staff paper series, Department of Applied Economics, University of Minnesota.

 http://harvestchoice.org/files/Liebenberg%20et%20al%202010%20UMN%20--%20South%20African%20Agricultural%20Research%20and%20Development-A%20Century%20of%20Change.pdf
- 48. Kahn, M. J. (2011) 'A bibliometric analysis of South Africa's scientific outputs some trends and implications' **S A Journal of Science** Vol 107, No 1-2, 1-6.
- 49. Liebenberg, F., Philip G. Pardey and Michael Kahn (2011) South African Agricultural R&D Investments: Sources, Structure, and Trends, 1910-2007. **Agrekon** Vol 50, No 2, 1-26.
- 50. Kahn, M. J. (2011) 'The fall of the Wall, the rise of the BRICs and the new scramble for Africa' **Foresight** Vol 13, Issue 3, 38 49.
- 51. Kahn, M J (2011) 'Innovation policy in South Africa paradoxes, progress and prospects' **Acta Academica Supplementum** 2, 1-19.
- 52. Kahn, M J (2011) 'The BRICS and South Africa as the gateway to Africa.' **SA Institute of Mining and Metallurgy** Vol 111, No 7, 493-6.
- 53. Kahn, M J (2012) Book Review: 'Daron Acemoglu and James A. Robinson, Why Nations Fail: The Origins of Power, Prosperity and Poverty' **African Journal of Science, Technology, Innovation and Development** Vol 4, No 3, 215-8.
- 54. Gault F, Bell M, Kahn M J, Muchie M and W Wamae (2012) 'Building capacity to Develop and Use STI indicators for grassroots innovation,' **African Journal of Science, Technology, Innovation and Development**, Vol. 4, No. 3, 22-31.
- 55. Kahn, M J (2013) 'Natural resources, nationalism and nationalization, **SA Institute of Mining** and Metallurgy Vol 113, 3-9.
- 56. Kahn, M J (2013) 'Rhetoric and change in South Africa's innovation policy', **Science, Technology and Society** Vol 18, No 2, 189-211.

- 57. Kahn, M J (2013) ICT innovation in South Africa Lessons learnt from Mxit, in **Proceedings of ITU Kaleidoscope: Building Sustainable Communities (K-2013)**, pp 1-6 Kyoto, Japan. Washington: IEEE ISBN 978-1-4673-4676-4
- 58. Ho, Y.S. and Kahn, M. J. (2014), A bibliometric study of highly cited reviews in the Science Citation Index Expanded. **Journal of the Association for Information Science and Technology**, Vol 65, No 2, 372–385.
- 59. Kahn, M J (2014) 'The rise of the BRICS and resource nationalism: challenge and opportunity for Africa's innovation systems', **African Journal of Science, Technology, Innovation and Development** Vol 6, No 5, 369-381.
- 60. Kahn, M J (2014) BRICS cooperation in science, technology and innovation: rhetoric and realities, **Revista Contexto Internacional** (in Portuguese) Vol 37, No 1.
- 61. Kahn, M J (2014) BRICS cooperation in science, technology and innovation: rhetoric and realities, http://www.federalismi.it/nv14/articolo-documento.cfm?Artid=27751 [As above; English]
- 62. Kahn, M J (2015) 'Prospects for cooperation in science, technology and innovation among the BRICS', International Organizations Research Journal Vol 10, No 2. (In Russian) http://iorj.hse.ru/en/2015-10-2/152401316.html
- 63. Kahn, M J (2015) Mobility of the highly skilled toward a non-racial South Africa **Science, Technology and Society** Vol 20, No 3, 369-388, doi:10.1177/0971721815597146
- 64. Kahn, M J (2016) Mitigating South Africa's HIV epidemic the interplay of social entrepreneurship and the innovation system **Minerva** 54(2), 129-150. (Published online 18 March 2016 http://dx.doi.org/10.1007/s11024-016-9293-x)
- 65. Kahn, M J (2017) La collaboration des BRICS dans les domaines de la science, de la technologie et de l'innovation **Hermes, La Revue** No 79, 2017/3, 124-131 (ISSN: 0767-9513) https://www.cairn.info/revue-hermes-la-revue-2017-3-p-124.htm
- 66. Kahn, M J (2018) Co-authorship as a proxy for collaboration: a cautionary tale **Science and Public Policy** Vol 45, Issue 1, Pages 117–123. https://doi.org/10.1093/scipol/scx052
- 67. Kahn, M J (2019) The contract between science and society: a South African case study. Science and Public Policy Vol 46, Issue 1, Pages 116-125 https://doi.org/10.1093/scipol/scy042.
- 68. Senkubuge F, Muthivi T, Loots G, Makangai M, Bockariei M, Nyirenda T, Muthuri J, Kirigia J, Kahn M, and J Shirinde (2019) Status of South Africa's National Health Research System: a 2018 update in: Rispel LC, Padarath A (Eds). **South African Health Review** URL: http://www.hst.org.za/publications/Pages/SAHR2018
- 69. Kahn M, Gamedze T and J Oghenetega (2019) Mobility of sub-Saharan Africa doctoral graduates of South African universities a tracer study. Int J for Educational

Consulting and Reports

- Kahn, M J (1990) Development of Science Teacher Education. University of Namibia
- Dock A and Kahn M J (1992) ODA/World Bank/ ANC study on Education, Johannesburg
- Kahn M J and Levy S (1992) <u>Science and mathematics education policy</u>, National Education Policy Investigation, Johannesburg
- Kahn M J (1993) <u>Sector Study on Science and Mathematics Education</u>. Commission of the European Communities, Pretoria
- Kahn M J (1993) <u>Building the Future policy for Science and Technology</u>, African National Congress, Johannesburg
- Kahn M J, Volmink, J and Mphahlele, L (1994) <u>ANC Implementation Plan for Education and Training (S&T and Further Education</u>, Centre for Education Policy Development. Johannesburg
- Kahn M J (1994) <u>Evaluation of the University Education Development Programme</u>. University of Natal
- Bruinsma, O and Kahn M J (1995) <u>Cooperation in science and mathematics for SADC states</u>, NUFFIC, Den Haag
- Kahn M J et al (1995-6) White Paper on Arts and Culture. Department of Arts, Culture, Science and Technology, RSA
- Kahn M J (1995) <u>Team member, Green Paper on Science and Technology</u>, Department of Arts, Culture, Science and Technology
- Kahn M J (1995-6) <u>Team Leader, Design and feasibility study for a National Research and Technology Foresight study</u>. Department of Arts, Culture, Science and Technology, RSA
- Kahn M J, Gering, M. and Masemola, P (1998) <u>Performance Measurement System for the Science Councils</u>. Department of Arts, Culture, Science and Technology, RSA
- Kahn M J (1999). <u>Toward an Education Management Information System</u>. Ministry of Education and Culture, United Republic of Tanzania
- Kahn M J (1999). <u>Framework for S & T Cooperation with SADC States</u>. Department of Arts, Culture, Science and Technology, RSA

- Kahn M J (1999). <u>Synthesis Report of the National Research and Technology Foresight study,</u> Department of Arts, Culture, Science and Technology, RSA
- Kahn M J and Gering, M (2001). <u>Information for Corporate Decision Making</u>, Department of Public Service Administration, RSA
- Kahn M J, Volmink, J and Mphahlele, L (2001). <u>National Strategy for Improving Science and Mathematics Education</u>, Ministry of Education, RSA.
- Kahn M J (2001) <u>National Strategy for Information and Communication Technology in Education</u>, Ministry of Education, RSA
- Kahn M J (2001). <u>Strategy toward a Biological Resource Centre</u>, Agriculture Research Council, RSA
- Gering, M.Z, Masemola, P and Kahn M J (2003). <u>Review of the Performance Measurement</u>
 System of the Science Councils, Department of Science and Technology
- Kahn M J and Moodley, S (2004) <u>Final Report of the Presidential National Commission on the Information Society and Development</u>, RSA
- Kahn M J et al (2004) Main Results of the 2001/02 R&D Survey, Department of Science and Technology, RSA.
- Kahn M J (2005). <u>Strategic Plan for the African Observatory of Science, Technology and</u> Innovation, NEPAD S&T Secretariat, Pretoria
- Kahn M J (2005). Strategy for Agriculture R&D, National Department of Agriculture, RSA
- Kahn M J et al (2005). Main Results of the 2003/04 R&D Survey, Department of Science and Technology, RSA
- Kahn M J and Steyn C (2006). <u>Knowledge Management Practices Survey</u>, Human Sciences Research Council
- Kahn M J et al (2006). Main Results of the 2004/05 R&D Survey, Department of Science and Technology, RSA
- Pedlar P and Kahn M J (2007) <u>Business case for the Foundation for Technological Innovation</u>, Department of Science and Technology, RSA
- Kahn M J (2007) <u>Human Resources for R&D</u>, in National Agriculture R&D Strategy , Department of Agriculture
- Kahn M J (2007) Technology 2019, Presidency Scenarios 2019 process

- Kahn M J et al (2007) Innovation Survey 2005, Department of Science and Technology, RSA
- Kahn M J et al (2007). Main Results of the 2005/06 R&D Survey, Department of Science and Technology, RSA
- Kahn M J (2007) Benefits of Publicly funded R&D, National Advisory Council on Innovation.
- Kahn M J (2008) <u>The design and implementation of R&D and Innovation Surveys, African</u>
 <u>Science, Technology and Innovation Indicators Initiative</u>, AU-NEPAD S&T, Pretoria, South Africa
- Kahn M J (2008) Scoping Study Toward an Observatory of Science and Technology, IDRC
- Kahn M J (2008) Metrics for Development, IDRC
- Kahn M J (2008) <u>Developing capacity to produce S&T Indicators</u>, African Union Advisory Council on Innovation, RSA
- Kahn M J (2009) Knowledge and Innovation S&T education in South Africa, World Bank
- Kahn M J (2009) Measuring Research and Development and Innovation in Latin America and the Caribbean. Inter-American Development Bank, Washington
- Kahn M J (2010) The State of Social Science Research. International Social Science Council, Paris
- Kahn M J (2010) Addressing the shortage of data on the Social Sciences and Humanities.

 European Science Foundation, Strasbourg and International Social Science Council, Paris
 Kahn M J (2010) Innovation, Finance and Funding in the National System of Innovation The
- South African Experience. BRICS Project, Federal University of Rio de Janeiro, Brazil.
- Kahn M J (2010) What are the knowledge gaps concerning South Africa's innovation system? Paper for the Ministerial Review Commission, pp. 25.
- Kahn M J (2011) <u>Toward a Higher Education Performance Measurement System</u>, research paper, National Research Foundation, Pretoria
- Kahn M J (2011) <u>Impact Study of the South Africa-Norway Science Collaboration Agreement</u>, 2007-2010, National Research Foundation, Pretoria
- Kahn M J (2011) <u>The New Context for Science, Technology and Innovation: What role for</u> Research Councils? Centre for Strategic Management Studies, Brasilia, Brazil.

- Lee A and Kahn M J (2011) <u>Securing the talent pipeline</u>. A <u>strategic study for the International Gas Union</u>. Deloitte Consulting Malaysia, pp240.
- Kahn M J (2011) <u>Governance of innovation systems: some implications</u>. A Paper for the Ministerial Review Committee, pp44.
- Kahn M J (2011) <u>The Future Trajectory of Science, Technology and Innovation In South Africa's</u>

 <u>Development</u>, A Paper for the National Planning Commission, pp30
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- Kahn M J (2012) The politics of resource nationalism, SA Institute of Mining and Metallurgy
- Kahn M J (2012) <u>Guidelines for the conduct of R&D Surveys in Developing Countries</u>, UNESCO Institute for Statistics, Montreal, Canada
- Pogue, T, Kraemer-Mbula, E Kahn M J (2012) <u>ERAwatch Report: South Africa 2011</u>, European Commission
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- Kahn M J (2012) The role of business in education, a position paper for the Centre for Development and Enterprise, Johannesburg, South Africa.
- Halme K and Kahn M J (2012) <u>Toward BioFISA II</u>, consultancy for the Finland Ministry of Foreign Affairs.
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- Ruigrok I and Kahn M J (2013) Review of the S&T Cooperation Agreement between the European Union and South Africa, European Commission

- Kahn M J (2013) <u>The status of Science, Technology, Engineering and Mathematics education in South Africa</u>. Australian Council of Learned Academies, Canberra, Autsralia.
- Kahn M J (2013) R&D Survey of Qatar. Design, develop and implement the first Frascaticompliant survey of R&D, including the use of on-line questionnaires. Ministry of Development Planning & Statistics, Doha.
- Kahn M J (2013) <u>Evaluation of the Support Programme for Industrial Innovation</u>, Genesis Analytics, Johannesburg. For The Presidency.
- Kahn M J and Comins N (2013) Review of the state of the Science, Technology and Innovation System in South Africa. Pretoria: Academy of Sciences of South Africa ISBN 978-0-9780160-5-8.
- Kahn M J and L Sanz- Menendez (2014) <u>Toward an Innovation Framework for the SADC Member States</u>. A report for the Southern African Innovation Support programme, Innovos Group, Argentina. http://www.saisprogramme.com/wp-content/uploads/2014/05/SAIS-Regional-Innovation-in-the-SADC-Region Final-Report May20141.pdf
- Kahn M J (2014) <u>Impact Evaluation of the National Research Foundation</u>. Expert on socioeconomic impacts for the Stellenbosch University School of Public Leadership.
- Kahn M J (2014) Innovation Leadership Development. A project for the Southern African Innovation Support programme (with Ramboll Group). Workshops delivered in Windhoek, Lusaka and Gaborone, March 2014.
- Kahn M J (2014) Analysis of the landscape of Social Science Research in South Africa. A report for the UK Department for International Development (with CREST, Stellenbsoch University).
- Kahn M J (2014) <u>Guide to Conducting an R&D Survey: For countries starting to measure research and experimental development</u>. Technical Guide of the UNESCO Institute for Statistics (main contributing author).
- Kahn M J (2014) <u>R&D Survey of Qatar. Close out and evaluation of R&D Survey 2012/13</u>, Ministry of Development Planning & Statistics, Doha.
- Kahn M J (2014) <u>International review of STI Indicator best practice</u>. CoE/CREST Stellenbosch University.
- James C, Lehtonen T, Kahn M J, Ahoonen S and M Ribelo (2015) <u>Programme document for the</u>
 Southern African Innovation Programme. NIRAS for Ministry of Foreign Affairs, Helsinki

- Kahn M J (2015) <u>Prospects for a Green Economy: Policy Briefs on the transition from post</u> <u>conflict reconstruction to structural transformation lessons of experience in the Horn of Africa. Addis Ababa: UN Economic Commission for Africa.</u>
- Kahn M J (2016) <u>Assessment of the Report on the 2013/14 Survey of Inputs to Research and Experimental Development</u>, Department of Science and Technology, Pretoria.
- Kahn M J (2016) <u>Training workshop facilitation for MDPS and Qatar Foundation: Towards the</u> 2015 R&D Survey, Qatar Foundation, State of Qatar, 26-27 September.
- Kahn M J and Y Koc (2016) <u>STI Indicators for the SDGs</u>, UNESCO Institute for Statistics, Montreal, Canada.
- Kahn M J (2017) Performance Analysis of the SA National System of Innovation, National Advisory Council on Innovation, Pretoria. http://www.naci.org.za/wp-content/uploads/2010/01/Performance-Analysis-Report.pdf
- Kahn M J (2017) R&D Survey 2015 Report, Qatar Foundation, State of Qatar, 26-27 September.
- Kahn M J (2017) <u>Leveraging Public Research for Innovation and Growth. An international Comparison of Knowledge Transfer Policies and Practices South Africa</u>. World Intellectual Property Organization, Geneva.
- Kahn M J (2017) <u>Higher Education and Science Councils Fieldwork and Estimation Methodology</u> <u>Project</u>. HSRC, Cape Town.
- Kahn M J (2018) <u>Status Report on STI in Africa</u>, lead paper, for "STI 2018 Forum on Science, Technology and Innovation in Africa," Cairo, 10-12 February, African Development Bank, Abidjan
- Kahn M J (2018) <u>Assessment of the 2018 Draft White Paper on STI</u>. Department of Science and Technology, Pretoria (unpublished).

Books, Chapters in books and other media

- 1. Kahn, M. J. and Swartland, J (1982) **Botswana, our country in Pictures.** Gaborone: Macmillan Botswana
- 2. Kahn, M. J. (1989) 'Indicators of Equity in Botswana Education', in Datta, A. and King, K. (Eds.) **Botswana: Education, Culture and Politics**, Edinburgh: Centre of African Studies
- 3. (1990) 'Science Education reform and the Dependency Paradigm' in Snyder, W and Ramatsui, P T. (Eds.) **Curriculum in the Classroom.** Gaborone: Macmillan Botswana

- 4. (1991). 'Microcomputing and Control' in Julie, C, Manie, A, Meerkotter, D, Prodgers, R, and Reeler, D. (Eds.) **Computers for Transformation in** Education Cape Town: Wyvern
- 5. (1993) Building the Base: A Sector Study on Science and Mathematics Education Pretoria: Commission of the European Communities pp 103
- Kahn, M. J. and Makhurane, P. (1998) 'The Role of Science and Technology in Development' in Naidoo, P. and Savage, M.(Eds.) African Science and Technology Education: into the new Millenium Cape Town: Juta
- 7. Kahn, M. J. and Volmink, J.D. (2000) **Mathematics and Science education in the Context of Lifelong Learning** Pretoria: Department of Education, pp. 38
- 8. Kahn, M. J. (2002) 'Promoting Co-operation in Science and Technology in the SADC Region' in Savage, M. and Naidoo, P. (Eds.) **Popularisation of Science and Technology Education: Some Case Studies from Africa** London: Commonwealth Secretariat
- (2002) 'Tentative Steps Toward South-South Cooperation: the case of South Africa and SADC in Mouton, J., Waast, R. and Ritchie, F. (Eds.) Proceedings of the Science in Africa Symposium Stellenbosch: Centre for Interdisciplinary Studies
- Kahn, M. J., Mphahlele, K.M. and Volmink, J.D (2003) 'Modernizing the curriculum the politics of technology education in South Africa' in Graube, G, Dyrenfurth, Michael J, and Theurkauf, Walter, E. (Eds.) Technology Education – International Concepts and Perspectives Frankfurt: Peter Lang Verlag
- 11. Kahn, M.J, Blankley, W, Reddy, V, Pogue, T, and Maharajh, R. (2004) Flight of the Flamingoes: A study on the Mobility of R&D Workers Pretoria: HSRC pp140
- 12. Kahn, Michael and Blankley, William (2006) 'The State of Research and Development' in Buhlungu, S, Daniel J, Southall, R and Lutchman, J (Eds.) **State of the Nation South Africa 2005-2006 Cape Town:** HSRC Press
- 13. Kahn, M. J. (2005) 'Matric Matters' in Reddy, V. (Ed.) **Marking matric** Cape Town: HSRC Publishing p 127-137
- 14. (2007) The macro view of Biotechnology capability in the South African Science System. In Chataway, J. and James, W. (Eds.) Biotechnology and Sustainability
- 15. (2007) 'Assessing International S&T Co-operation for Sustainable Development:"Art of the State" in Integrating Science & Technology into Development Policies: An International Perspective. Paris: OECD Publishing
- 16. (2007) 'Globalisation of research and development: Challenges and opportunities for South African higher education,' in Kishun, R. (Ed.) The Internationalisation of Higher Education in South Africa. Durban; International Education Association of South Africa

- 17. (2008) Science and Technology Policy. In Kraak, A. (Ed.) **Human Resources Directory 2006** (HSRC Press, Cape Town)
- 18. (2010) 'Measure for Measure. Quantifying the social sciences' in **World Social Science Report 2010**. Paris: UNESCO.
- (2010). Measuring R&D: Challenges faced by Developing Countries. Technical Paper No
 UNESCO Institute for Statistics, Montreal. http://www.uis.unesco.org/ev.php?ID=8123 201&ID2=DO TOPIC
- (2011) with Cooper, D. 'Introduction: A short overview of South African research and innovation' in Cooper, D. The University in Development: case studies of use-oriented research. Cape Town: HSRC Press. p149-166.
- 21. (2012) 'Implementing a Research Data Access Policy in South Africa' in Kathie Bailey Mathae and Paul F. Uhlir (Eds) The Case for International Sharing of Scientific Data: A Focus on Developing Countries Proceedings of a Symposium. Washington, National Academies Press.
- 22. Kahn M J, De Melo L M and Matos, M. (Eds) (2014) **Financing innovation** New Delhi: Routledge, pp 256.
- 23. Kahn M J. (2014) South Africa, in Kahn M J, De Melo L M and Matos, M. (Eds) (2014). **Financing innovation** New Delhi: Routledge p201-236.
- 24. Kahn M J,. De Melo L M and Matos, M. (2014) The Financing of Innovation, in Kahn M J, De Melo L M and Matos, M. (Eds) (2014). **Financing innovation** New Delhi: Routledge p1-20
- 25. Ruigrok, I and Kahn M J (2014) **Review of the Science and Technological (S&T) cooperation Agreement between the European Union and South Africa** Brussels: Directorate-General for Research and Innovation, European Commission. pp 56.
- 26. Kahn M J. (2014) STEM education in the quest to build a new South Africa, in Freeman, B., Marginson, S., and R Tytler (Eds) The Age of STEM Educational policy and practice across the world in Science, Technology, Engineering and Mathematics. London: Routledge
- 27. (2015) 'BRICS Cooperation in Science, Technology and Innovation: Rhetoric And Realities' in Scaffardi, L (Ed) The BRICS Group in the Spotlight: An interdisciplinary approach, Collana della Facoltà di Giurisprudenza dell'Università degli Studi di Parma Vol 5, 85-106, ISBN 9788849529654
- 28. (2015) 'Resource rents, resource nationalism and innovation policy: perspectives on Africa and the BRICS' in Lins Ribeiro G, Dwyer T, Borges A and E Viola (Eds) Social, political and cultural challenges of the BRICS. Published online: http://portal.anpocs.org/portal/images/stories/pdf/BRICS%20Ingl%C3%AAs%20baixa.pdf. 453-474

- Schmoch U and Kahn M J (2017) Technologie und Innovationspolitik, in de la Fontaine, D., Müller, F., Hofmann, C., Leubolt, B. (Eds) *Das politische System Südafrikas*. Berlin: Springer VS (In German) p357-376. ISBN 978-3-531-19067-9. doi: 10.1007/978-3-531-19067-9
- 30. Kahn M J (2017) Business does do Research. Letter to the Editor, Business Day, 22 September 2017. https://www.businesslive.co.za/bd/opinion/letters/
- 31. (2018) Prospects for cooperation in science, technology and innovation among BRICS members, in Kirton J and Larionova M (eds) **BRICS and Global Governance**, New York, Routledge p168-186 ISBN 9781317172574. https://doi.org/10.4324/9781315569925
- 32. (2018) Age of Extremes II in Sanz N and C Tejada (Eds.) **Innovación Para El Desarrollo Sostenible**, Mexico City, and UNESCO p 483-492.
- 33. (2018) Welcome to the (Peoples') Republic of Bantustan. Focus: The Journal of the Helen Suzman Foundation, Issue 83, 23-27.

Invited addresses, Conferences and Workshops (post 1994)

- Kahn M J (1994) Paper: 'Technology as subject, within Science, or across the curriculum? 7th Conference of the International Organisation for Science and Technology Education, Veldhoven, Netherlands
- (1994) Paper: 'Education under the new flag', (invited) to the Independent Examinations Board User Conference, Johannesburg
- (1995) Paper: 'From Policy to Implementation: the "SYSTEM" initiative as a case study', 3rd Annual Meeting of SAARMSE, Cape Town, 1995
- Kahn M J, Volmink, J., Naidoo, P. and Mhlongo, M. (1995) Paper: 'Planning Science Education at Secondary Level' South African Country Paper presented to the IIEP Science Planning Forum, Magaliesburg
- Kahn M J. (1995) Paper: 'The Role of Science and Technology in Development: the case of Africa', invited respondant to Prof. P. Makhurane at the African Science and Technology Educators meeting, UDW, December 1995
- (1995) Paper: 'From invention to innovation: can science education do it?'
 International Conference on Improving the Effectiveness of Science Teaching",
 Windhoek, December 1995
- (1997) Paper: 'Gender imbalances in Technical Education', Committee on Gender Inequality in Education, 1997

- (2000) Paper: 'The African Century: Challenges and Opportunities for Science and Technology'. Keynote address to Science and Technology Educators Conference, Cape Town, 22 September, 2000
- (2001) Paper: 'The Emerging Strategy for Science, Mathematics and Technology Education' Keynote address to International Conference on Technology Education, Cape Town, 3 – 6 October, 2001
- (2004) 'Now and then: an innovation system in transition,' paper presented at the 10th
 Schumpeter Conference "Industrial dynamics, innovation and transformation –
 Schumpeterian legacies" Milan, Italy, June 9 to 12 2004
- (2005) 'Overview of HRD and R&D Policy: Recent Research and Indicators.' Background document for the Human Resources for Knowledge Production Conference, Cape Town, Department of Science and Technology
- (2005) 'Agricultural R&D' presentation to the National Agriculture Research Forum,
 Pretoria
- (2005): 'Measuring and Mapping African National Systems of Innovation' invited panelist at Globelics 2005, Pretoria
- (2005) 'Measuring International Cooperation in S&T for Sustainable Development' invited panelist, OECD-SA Conference, Pilanesberg, 21-22 November 2005
- (2006) Paper: 'Overview of the South African System of Innovation a gender perspective' concept paper for the National Advisory Council on Innovation
- (2006) Invited address: Going global: working with South Africa's universities.'
 University of Kwazulu-Natal Conference on Globalization of research and development:
 Challenges and opportunities for South Africa higher education, Durban, 25 August 2006
- (2006) Seminar: Science and Technology Policy in Transition Countries: Experience of South Africa. Higher School for Economics, Moscow
- (2006) Paper: Measuring 'SERVERD' pie in the sky or substantive activity? OECD-Statistics 'Blue Sky II' conference Ottawa Canada, 25-27 September 2006.
- (2007) Invited address 'Innovation and R&D in the Services sector of an emerging economy: some micro evidence from South Africa' Micro evidence conference UNU-Intech/MERIT, Maastricht
- (2007) Keynote address 'Innovation and Growth' International Futures Conference, Institute for Future Studies, University of Stellenbosch
- (2007) Invited address 'Toward a Knowledge Economy' SA-EU Conference Marking Ten Years of S&T Cooperation, Cape Town

- (2008) Invited seminar 'Getting the measure of the South African system of innovation'
 Royal Society of South Africa, March 2008
- (2008) Invited seminar 'Understanding R&D and Innovation in Services; evidence from South Africa' Science Policy Research Unit, University of Sussex
- (2008) Discussant World Bank-OECD 'Innovation and Sustainable Developemnt,' Paris
- (2009) Invited discussant UNESCO-OECD 'Innovation and Development: Translating knowledge into value,' Paris
- (2009) Paper: 'Innovation Strategy of South Africa under Transition: Technology in the Time of Cholera,' X-th International Academic Conference on Economic and Social Development, Higher School for Economics, Moscow, 7-9 April 2009
- (2009) Paper: 'From isolation to Openness' Third UNU-MERIT MEIDE Conference, Rio de Janiero
- (2009) Paper: 'Triple helix partnerships and South Africa's innovation plan clues to likely success' 7th Triple Helix Confernce, University of Strathclyde, Scotland
- (2010) Keynote speaker 'Innovation and development,' 2nd Innovation Summit,
 Johannesburg
- (2010) Keynote Speaker 'The Changing face of Innovation in South Africa,' Innovation Festival 2010
- (2010) Trainer: 'Learning about innovation and the use of indicators training workshop,' Institute for Economic Research on Innovation, Pretoria, September 2010
- (2010) Trainer: 'Addressing the Shortage of Data on the Social Sciences and Humanities.' Facilitated workshop for the European Science Foundation/ International Social Science Council, Strasbourg 14-15 September 2010.
- (2011) Keynote speaker 'Toward the African Observatory on STI' African Union Workshop, Malabo, Equatorial Guinea, 20-21 January 2011.
- (2011) Invited speaker 'Roaring ahead: LDCs, growth, and the role of S, T & I' Preparatory workshop for the 4th United Nations Conference on the LDCs, Istanbul
- (2011) Invited speaker 'Implementing a research data policy in South Africa', BISO-BRDI-CFRS Symposium. The National Academies, Washington D.C.
- (2011) Invited speaker: 'Evidence based STI Policy formulation, strategy and planning.
 The SA case and why indicators matter.' UNESCO SCIGAP Roundtable, Paris
- (2011) Keynote address: 'Implications of a bibliometric analysis of South Africa's outputs in clinical science.' UCT Clinical scholars programme workshop.

- (2011) Keynote speaker: 'Research centres in the periphery the grand challenges, the South, and agency.' Joint Seminar of NIRPA, NordForsk and Academy of Finland on Research Policies for Grand Challenges – Strategies and Tools, Helsinki
- (2011) Paper: 'The New Growth Path, PROs and the Developmental State,' Globelics 2011, Buenos Aires
- (2011) Invited address: 'The Measurement of R&D and Its Relevance to Innovation Policy, Workshop on Measuring R&D Outcomes Jointly Organized by the Qatar Foundation and QSA Doha
- (2012) Invited address: 'Innovation policy in turbulent times', Innovation and Development and Africalics conference, Dar es Salaam, Tanzania,
- (2012) Invited address: 'The National Development Plan, system of innovation, and higher education,' 2nd Higher Education SA Research and Innovation Conference, Pretoria
- (2012) Keynote speaker: 'Building Science, Technology and Innovation Capacities in Africa: The role of an African Observatory for STI' African Union/NEPAD intergovernmental meeting on AOSTI, Malabo, Equatorial Guinea
- (2012) Paper: 'Innovation Policy and the Developmental State', Innovation Management IM2012 Conference, Beijing, China.
- (2012) Invited address: 'Nurturing the future generations' 25th International Gas Congress, Kuala Lumpur
- (2012) Paper: 'Innovation policy and the Developmental State' XV111 South African Sociology Association Conference, University of Cape Town
- (2012) Keynote speaker: 'Management challenges and the innovation system,' SARIMA 10th anniversary conference, Port Elizabeth
- (2012) Invited address: 'Toward a new social contract,' DST-HSRC conference 'A scientific temper for the BRICS – the agenda for youth' CSIR, Pretoria
- (2012) Invited address: 'Challenging dependency the rise in S&T networking as evidenced through co-publication,' LAP 2020 Conference: EURO-BRICS process- toward a set of thematic cooperation networks, Cannes, France
- (2012) Keynote speaker: 'Innovation policy for inclusion: the case of South Africa,'
 UNESCO International Symposium on Accelerating Innovation in Developing Countries,
 Kuala Lumpur
- (2012) Keynote speaker: 'Innovation and inequality: is there a trade off?' OECD-DST UNESCO International Conference on Inclusive Innovation, Cape Town

- (2013) Paper: 'ICTs and development: the case of Mxit' ITU Conference on ICTs and Development, Kyoto, Japan
- (2013) Invited discussant: 'IPRs, brain drain and innovation' **WIPO Wor**kshop, Geneva
- (2013) Invited address: Resource nationalism and the BRICS: threats & opportunities for innovation systems, LEAP-MGIMO 4th Euro-BRICS Seminar, Moscow
- (2013) Invited address: 'The BRICS and Global Governance South African perspectives' Conference on BRICS Universities in strategic cooperation, Fudan University, Shanghai, China
- (2013) Paper: 'Spillovers from military R&D: a tale of three companies,' Innovation
 Summit 2013, Industrial Development Corporation, Johannesburg
- (2013) Invited address: 'Resource nationalism, Africa and the BRICS,' 37th ANPOCS
 Conference, Aguas da Lindoia, Brazil
- (2013) Lead and facilitator: **Training workshop on conducting an R&D Survey**, 28-30 October, 2013, Doha, Qatar.
- (2013) Invited discussant: UNIDO General Conference. The LDC Ministerial Conference, Lima, Peru
- (2014) Invited discussant: South-South Partnerships and the Role of Europe, inaugural
 Conference of the new program Point Sud La Coopération Scientifique Sud-Sud Et Le
 Rôle De L'Europe, Stellenbosch Institute for Advanced Studies, Stellenbosch
- (2014) Paper: SMEs and the telemetry system of innovation **IAMOT 201**4, Washington 22-26 May 2014
- (2014) Invited Paper, Research evaluation: the quest for maximum impact, ICSU
 International Workshop "Science assessment and research integrity", Beijing, China, 9
 April 2014
- (2014) Paper: Globalization of research through regional collaboration: South Africa's role in SADC innovation policy and practice, SARIMA Conference 2014, Gaborone, Botswana
- (2014) Co-facilitator: **'Toward the Stellenbosch innovation District'**, Stellenbosch 30-31 October
- (2014) Keynote speaker: 'Innovation in practice in Southern Africa; Insights from the SAIS regional study' **Southern Africa Innovation Foru**m (SAIF), Johannesburg 5-6 November

- (2014) Invited speaker: 'BRICS cooperation in science, technology and innovation: rhetoric and realities,' **The BRICS group in the spotlight: an interdisciplinary approach, Conference** at Parma University, Italy 6-7 November.
- (2015): Keynote Speaker 'Ownership: Reflections on the contract between science and society', **DFG-UNU Conference on Science and Sustainable Development**, New York, 23-24 April.
- (2015): Paper 'Challenging dependency: opening the SADC innovation space,' **University-Industry Interaction Conference**, Berlin, Germany, 24-26 June.
- (2015): Invited Keynote 'Challenging dependency: opening the SADC innovation space,'
 Research and Innovation Network, Creil, France 26 August.
- (2015): Invited Keynote 'Thought for Food: Perspectives on Agricultural R&D in the SADC,'
 2nd Seminar on Innovation and Development: Politics of Research and Innovation, CIRAD, Montpellier, France, 1 September.
- (2016): Plenary speaker 'Evolution of science policy in South Africa: plus ca change ...'
 IDRC/IRD/IFRIS International Conference: The transformation of research in the South:
 Policies and outcomes, OECD, Paris, France, 21-22 January.
- (2016): Plenary speaker 'Research and Innovation' UN Economic Commission for Africa Roundtable: Beneficiation and mineral value chains. Johannesburg, South Africa, 8-9 April.
- (2016): Plenary speaker 'Euro BRICS scientific cooperation' Instrumentality of the Euro BRICS in addressing the challenges of the multipolar world', **Public conference, Embassy of India**, Paris 30 April.
- (2016): Invited lecturer 'Making sense of bibliometrics for policy formulation', **Globelics Doctoral Academy**, Tshwane University of Technology, Pretoria 23 June.
- (2016) Paper: 'Big Science, co-publication and collaboration: getting to the core' ENID
 STI2016 Conference, UPV, Spain, 18 September
- (2016) Paper: Updated and revised: 'Big Science, co-publication and collaboration: getting to the core' SciSTIP International Conference, Stellenbosch University, 30 October – 3 November
- (2017) Paper: 'International Comparison of Knowledge Transfer Policies and Practices: South Africa' **WIPO Workshop**, UNU-MERIT, Maastricht, Netherlands, 28 29 March
- (2017) Invited speaker to Pre-Budget Vote Meeting: 'Performance of the System of Innovation' Department of Science and Technology, South African Museum, Cape Town, 16 May.

- (2017) Keynote Speaker: 'Age of Extremes II', UNESCO International Forum on Intellectual Cooperation for Innovation in a Time of Social and Political Challenges, Guanajuato, Mexico, 14-15 September
- (2017) Invited panelist: 'R&D Investment and Transformation', International Conference of the Transformative Innovation Policy Consortium, 20-21 September, Pretoria, South Africa
- (2017) Paper: 'Finding the escape shaft: from resource curse to industrial growth 15th
 Globelics Conference, Athens, Greece, 11-13 October
- (2018) Keynote speaker and facilitator: 'Reflecting on R&D Survey 2015, and Toward Innovation Survey 2015-17, Doha, Qatar, 16 January
- (2018) Discussant: Workshop on the Organization, Economics and Policy of Scientific Research, CREI University of Bath, 27-28 April
- Kahn M, Gamedze T and J Oghenetega (2018) Paper: 'From migrant labour to migrant students a South African conundrum' RSA Annual Conference, Universita Svizzera Italiano, Lugano, Switzerland, 4-6 June.
- (2018) Paper: 'The contract between science and society implications for innovation policy,' 11th Schumpeter Society biennial conference, Seoul, Korea, 2-4 July

Kahn M, Gamedze T and J Oghenetega (2018) Paper: 'From migrant labour to migrant students – a South African conundrum' Globelics 2018, Accra, 24-26 October 2018..

PUBLIC SERVICE

Medu Arts Ensemble, Convenor of Photography Unit, Gaborone, Botswana. 1979-1985

ANC Interim Science and Technology Group, member and head of S&T Education Commission 1990-1994

Science and Mathematics Group, National Education Policy Initiative, Convenor 1991-1993

Southern African Association for Research in Science and Mathematics Education, co-founder and Board member 1993-1996

Foundation for Education, Science and Technology, Board Member and Chair of Council 1996-2002

Northern Museums Flagship Institution, Board Member 1999-2003

Joint Matriculation Board, Board Member 2000-2002

Interactive Science Foundation, MTN Sciencentre, Board Member

2002-2010

Presidential Commission on the Information Society and Development, Member

2002-2004

OECD working party of National Experts on Science and Technology Indicators (NESTI), South African representative.

2002-2008

Multichoice Foundation, Board Member

2003-2005

Southern African Research and Innovation Management Association, Member of Executive Committee.

2004-2007

Agricultural Research Council, Vice Chairperson 2015-2016

Chairperson R&D and Evaluation Committee 2006-2015; Chairperson Strategy Committee 2015-2016

Research Policy Advisory Editor (Elsevier)

2006 -

OECD working party of National Experts on Science and Technology Indicators (NESTI).

Member, Advisory Board

2008-2010

Spirit of 68 Postgraduate Award, University of Cape Town

Donor and Referee

2010-

Ministerial Review Committee on Science and Technology, Member and Lead Researcher.

2010-2012

Rhodes High School School Governing Body, Mowbray, Cape Town. Member.

2012-2013

Euro BRICS Young Leaders Summit Member, Advisory Board.

2015 -2017

Chief Albert and Nokukhanya Luthuli Peace and Development Institute Foundation, Director,

Board member, and Chair of the Project and Research Committee

2016-

D G Murray Trust, Trustee and Board Member

2018-

AWARDS AND HONOURS

Dux Medal and Salamon Award, Sea Point Boys High School, Cape Town 1965

CSIR Merit Scholarship, CSIR: Pretoria

1969

Crasnow Scholarship, University of Cape Town

1970

Honorary Research Fellow, Chelsea College, London

1988

Individual contribution to SET over a lifetime (Runner up), National Science and Technology

Forum

2003

Elected Member, Academy of Science of South Africa, Elected Member 2008 -

De Swardt prize for the best article in Agrekon, (jointly with Pardey, P and Liebenberg, F) 2011

International Research Fellow Centro de Gestão e Estudos Estratégicos (Brazil) 2011