

**Profesor Dr. Mohamad Rashidi Bin Md. Razali**  
**dalam Kenangan**  
**(1948–2002)**

Allahyarham Profesor Dr. Mohamad Rashidi Bin Md. Razali dilahirkan pada 18 Julai 1948 di Kajang, Selangor telah kembali ke rahmatullah pada 25 Ogos 2002, meninggalkan seorang anak dan balu Puan Halimatun Bt. Hj. Ramli. Beliau adalah Dekan Fakulti Sains Universiti Teknologi Malaysia (UTM) dari 1 Ogos 1998 hingga 31 Julai 2002. Terdahulu daripada itu beliau banyak menyandang jawatan dalam pentadbiran UTM termasuk sebagai Ketua Jabatan Matematik (1985–1989) dan Timbalan Dekan Fakulti Sains (1992–1997). Beliau juga pernah memegang jawatan Pengarah Institut Ibnu Sina UTM (1997–1998).

Beliau berkelulusan B.Sc. (Hons) (Malaya) (1973) dalam bidang matematik, M.Sc. (Bath) (1975) dalam bidang Analisis Berangka, dan Ph.D. (Southampton) (1983) dalam bidang matematik. Kerjaya beliau di UTM bermula pada 10 Mei 1973 apabila dilantik sebagai Penolong Pensyarah A. Sebagai Pensyarah, beliau terus memperbaiki dan menambah ilmu berkenaan pengajaran di samping melakukan beberapa penyelidikan dalam bidang Matematik dan Pendidikan Matematik. Hasil penyelidikan ini telah ditulis dalam beberapa kertas kerja dalam jurnal dan juga dibenteng dalam persidangan pada peringkat kebangsaan dan juga antarabangsa. Beliau dilantik sebagai Profesor Madya pada tahun 1986, Profesor (Gred Khas C) pada tahun 1991, dan Profesor (Gred Khas B) pada tahun 2000.

Pada tahun 1990-an beliau telah bertukar ke bidang Pemetaan Konformal Berangka, suatu bidang yang baru diterokai dalam dunia matematik. Kajian bidang menjadi aktif semula apabila terdapat komputer yang boleh membantu dalam pengiraan. Kumpulan beliau di UTM telah mula mendapat pengiktirafan antarabangsa dalam bidang ini berdasarkan bahawa beliau sering menerima undangan membenteng kertas kerja pada peringkat antarabangsa di mana terdapat bidang pemetaan konformal berangka, contohnya:

- 98<sup>th</sup> Annual Meeting of The American Mathematical Society, Baltimore, USA, 8–11/1/1992.
- International Conference on Computational Methods and Functional Theory CMFT 94, Penang, 21–25/3/1994.
- International Conference on Computational and Applied Mathematics, Leuven, Belgium, 21–26/7/1996.
- First International ISAAC '97 Congress, Delaware, USA, 3–7/6/1997.
- International Conference on Computational Methods and Functional Theory CMFT 97, Cyprus, 1997 (dihadiri oleh Dr. Ali Hassan bin Mohd. Murid).
- Second International ISSAC '99 Congress, Fukuoka, Japan, 8/1999. (Tidak dapat hadir kerana tarikh bertembung dengan Hari Konvokesyen UTM).
- International Conference on Computer Based Experiments, Learning and Teaching "COMBELET '99", Poland, 28/9–1/10/1999.
- Computational Methods and Function Theory 2001, Portugal, 25–29 Jun 2001.

Beliau juga telah diundang menjadi salah seorang ahli *International Scientific Committee*, *COMBELET-99* di Poland dan juga *Scientific Committee* bagi *COMBELET-00* dan *COMBELET-01*. Di samping itu, beliau juga telah diundang menjadi penilai kertas kerja bagi prosiding, *Conference of the International Group for the Psychology of Mathematics Education*, 1994 dan *Journal of Computational and Applied Mathematics*.

Penyelidik-penyelidik lain juga sering menghantar kertas kerja mereka untuk mendapatkan komen. Antara rakan-rakan penyelidik yang rapat dengan beliau ialah:

- Professor N. Papamichael, Naib Canselor, University of Cyprus
- Professor M.Z. Nashed, Department of Mathematics, University of Central Florida, USA
- Professor T.K. DeLillo dan Professor A.R. Elcrat, Department of Mathematics and Statistics, Wichita State University, USA
- Professor K. Amano, Department of Computer Science, Ehime University, Japan
- Professor Saburou Saitoh, Department of Mathematics, Gunma University, Japan
- Professor D. Gaier, University of Giessen, Germany

Kali terakhir beliau membuat kunjungan akademik ke luar negara ialah ke Fakulti Kejuruteraan, Gunma University, Jepun pada 10–23 Februari 2002 (di bawah Program *JSPS-VCC General Exchange*).

Kertas kerja beliau kebanyakannya diterbitkan dalam:

- (i) Journal of Integral Equations and Application
- (ii) Journal of Computational and Applied Mathematics
- (iii) Journal of Computer and Mathematics with Application
- (iv) Results in Mathematics

Mengimbas kecemerlangan beliau yang terserlah dalam akademik, beliau adalah antara penyokong dalam bidang *numerical conformal mapping via integral equation*. Antara sumbangan besar beliau ialah beberapa penerbitan berkenaan kaedah persamaan kamiran menerusi inti Bergman. Sebelum itu idea persamaan kamiran terhadap inti Szego telah muncul secara tersirat dalam Kerzman dan Stein (1978) dan secara eksplisit oleh Kerzman dan Trummer (1986). Kedua-dua inti Bergman dan Szego adalah inti penjanaan semula dan saling berkaitan dengan fungsi pemetaan Riemann. Semenjak 1986 hingga 1995 tiada pengetahuan mengenai persamaan kamiran terhadap inti Bergman yang diperolehi. Kertas kerja oleh Rashidi, Murid dan Nashed (1996) telah menemukan persamaan kamiran berkenaan. Kaedah yang cemerlang itu telah dikembangkan kepada pemetaan konformal luaran melalui persamaan kamiran baru dengan inti Kerzman-Stein. Satu lagi persamaan kamiran baru juga ditemui oleh Profesor Mohamad Rashidi dalam *Riemann Boundary Value Problems*. Kajian yang belum lengkap ini sedang giat diteruskan oleh rakan-rakan penyelidik di UTM.

Selain itu, Profesor Mohamad Rashidi juga aktif dalam bidang pendidikan matematik dengan membentuk kumpulan *Diagnostic and Remedial Mathematics Research Group* (DARMA) di UTM.

Dalam aspek lain, Profesor Mohamad Rashidi banyak terlibat dalam penerbitan dan Ensiklopedia Sains dan Teknologi yang mana beliau merupakan ketua projek sejak 1994. Projek tajaan Dewan Bahasa dan Pustaka itu setakat ini telah menyiapkan 3 daripada 12 jilid yang dirancangan.

Sumbangan-sumbangan lain beliau di UTM ialah:

- Penubuhan Institut Ibnu Sina.
- Pemantapan program pasca-ijazah di Fakulti Sains.
- Pemantapan pengurusan latihan industri pelajar fakulti.
- Pemantapan pengurusan penyelidikan.
- Penggunaan komputer untuk tujuan inventori, pengurusan akademik dan sistem maklumat.
- Penubuhan Jabatan Biologi.
- Penyediaan Perancangan Strategik Fakulti Sains.
- Penubuhan Jawatankuasa Kualiti.
- Penubuhan Jawatankuasa Audit Akademik.

Profesor Mohamad Rashidi juga merupakan seorang yang gigih dan prihatin terhadap tugas dan tanggungjawabnya. Sepanjang kerjaya beliau sebagai Pensyarah/Profesor, beliau telah menyelia puluhan pelajar pelbagai peringkat B.Sc./M.Sc./Ph.D. dan setiap satunya memperoleh kejayaan cemerlang. Beliau juga banyak menyumbang dalam lingkungan ilmiah termasuk aktif dalam Persatuan Sains Matematik Malaysia, Ketua Editor Jurnal MATEMATIKA dan menganggotai pelbagai jawatankuasa di peringkat kebangsaan seperti:

- Ahli Panel Anugerah Pendidikan Matematik, MPKSN.
- Ahli Jawatankuasa Pengiktirafan Kelulusan Sains, Jabatan Perkhidmatan Awam.
- Ahli Jawatankuasa Penasihat, Sekolah Teknologi Maklumat, Universiti Utara Malaysia.
- Ahli Jawatankuasa Penasihat, Kursus Sains Gunaan, Universiti Islam Antarabangsa.
- Penggubal soalan peperiksaan Matematik Lanjutan T, Sijil Tinggi Persekolahan Malaysia.
- Penilai Luar Pelajar Siswazah di Universiti Kebangsaan Malaysia, Universiti Putra Malaysia dan Universiti Sains Malaysia.
- Ahli Kerja Persatuan Matematik Malaysia.

Beliau juga turut mendapat banyak undangan untuk menyampaikan syarahan jemputan di persada antarabangsa. Di atas kegigihannya, beliau telah dianugerahkan Pingat Darjah Kebesaran Setia Mahkota Selangor pada 1997.

Disediakan oleh:

Bahrom Sanugi dan Ali Hassan Mohd. Murid

***In Memory of***  
***Professor Dr. Mohamad Rashidi Bin Md. Razali***  
***(1948–2002)***

*The late Professor Dr. Mohamad Rashidi, born on 18th July 1948 in Kajang, Selangor, passed away on 25th August 2002. He leaves behind a wife, Puan Halimaton Bt. Hj. Ramli, and a son. Professor. Dr. Rashidi was the Dean of the Science Faculty, Universiti Teknologi Malaysia (UTM) from 1st August 1998 to 31st July 2002. Prior to this, he served as the Head of the Mathematics Department (1985-1989), Deputy Dean of the Science Faculty (1992-1997), Director of the Ibnu Sina Institute, UTM (1997–1998) and held various other administrative posts.*

*He obtained his B.Sc. (Hons.) (Malaya) (1973) in Mathematics, M.Sc. (Bath) (1975) in Numerical Analysis and Ph.D. (Southampton) (1983) in Mathematics. He started his career at UTM on 10th May 1973 as a Category A Assistant Lecturer. As a lecturer, Professor Dr. Rashidi continued to improve on and expand his knowledge in teaching as well as conducting research in the fields of Mathematics and Mathematics in Education. His research findings have been published in journals and have also been presented at national and international conferences. He was promoted to the post of Associate Professor in 1986, Professor (Super Scale C) in 1991 and Professor (Super Scale B) in 2000.*

*In the 1990s, he switched his field of study to Numerical Conformal Mapping, a new research field in Mathematics. His research was given an impetus with the advent of computers that aided him in his calculations. His team in UTM began to receive international recognition as they were frequently invited to present papers at international levels on Numerical Conformal Mapping.*

*Some of the international conferences that he attended and presented research papers are as follows:*

- 98<sup>th</sup> Annual Meeting of The American Mathematical Society, Baltimore, USA, 8–11/1/1992.*
- International Conference on Computational Methods and Functional Theory CMFT 94, Penang, 21–25/3/1994.*
- International Conference on Computational and Applied Mathematics, Leuven, Belgium, 21–26/7/1996.*
- First International ISAAC '97 Congress, Delaware, USA, 3–7/6/1997.*
- International Conference on Computational Methods and Functional Theory CMFT 97, Cyprus, 1997 (attended by Dr. Ali Hassan bin Mohd. Murid).*
- Second International ISSAC '99 Congress, Fukuoka, Japan, 8/1999. (unable to attend because the dates coincided with the UTM Convocation).*
- International Conference on Computer Based Experiments, Learning and Teaching "COMBELET '99", Poland, 28/9–1/10/1999.*
- Computational Methods and Function Theory 2001, Portugal, 25–29 Jun 2001.*

*He was also appointed as a member of The International Scientific Committee, COMBELET-99 in Poland, the Scientific Committee for COMBELET-00 and COMBELET-01. In addition, he was appointed as an assessor of research papers for the proceedings in the International Group for the Psychology of Mathematics Education Conference, 1994 and the Journal of Computational and Applied Mathematics.*

*Other researchers would frequently submit their research papers to him for comments. Among his close fellow researchers are:-*

- *Professor N. Papamichael, Vice Chancellor, University of Cyprus*
- *Professor M.Z. Nashed, Department of Mathematics, University of Central Florida, USA*
- *Professor T.K. DeLillo and Professor A.R. Elcrat, Department of Mathematics and Statistics, Wichita State University, USA*
- *Professor K. Amano, Department of Computer Science, Ehime University, Japan*
- *Professor Saburou Saitoh, Department of Mathematics, Gunma University, Japan*
- *Professor D. Gaier, University of Giessen, Germany*

*Professor Dr. Mohamad Rashidi Bin Md. Razali's last academic trip overseas was to the Engineering Faculty at Gunma University, Japan from 10–23 February 2002 (under the JSPS-VCC General Exchange Programme).*

*Most of his research papers were published in:*

- (i) Journal of Integral Equations and Application*
- (ii) Journal of Computational and Applied Mathematics*
- (iii) Journal of Computer and Mathematics with Application*
- (iv) Results in Mathematics*

*Based on his excellent academic achievement, Professor Dr. Mohamad Rashidi was one of the strong advocates of numerical conformal mapping via integral equation. Among some of his valuable contributions are several publications related to the application of the Bergman kernel function to the integral equation method. Prior to that, the idea of integral equation towards the Szego kernel function has appeared implicitly in Kerzman and Stein (1978) and explicitly in Kerzman and Trummer (1986). Both Bergman and Szego's kernel functions are well-known reproducing kernels and are closely related with the Riemann mapping function. From 1986 to 1995, there was no knowledge on the integral equation for the Bergman kernel function. The integral equation was introduced through a research conducted by Rashidi, Murid and Nashed in 1996. This discovery was later extended to exterior conformal mapping through a new integral equation with Kerzman-Stein kernel. Another new integral equation was discovered by Professor Mohamad Rashidi in Riemann Boundary Value Problems. Fellow researchers in UTM are currently working on completing this research project.*

*Apart from that, Professor Mohamad Rashidi was also active in the field of Mathematical Education. He established the Diagnostic and Remedial Mathematics Research Group (DARMA) at UTM.*

*In other aspects, Professor Mohamad Rashidi was also involved in several publications and the encyclopedia of Science and Technology. He was the project leader since 1994. So far, Dewan Bahasa dan Pustaka, the sponsor of this project, has published 3 out of the 12 volumes planned.*

*Among his other contributions in UTM are:*

- *The setting up of the Ibnu Sina Institute.*
- *The establishment of the Post-graduate Programme in the Science Faculty.*
- *The establishment of the Research Management.*
- *The use of computers in inventory, academic management and information systems.*
- *The setting up of the Biology Department.*
- *The preparation for the Science Faculty Strategic Planning.*
- *The establishment of the Quality Committee.*
- *The establishment of the Academic Audit Committee.*

*Professor Mohamad Rashidi was also very diligent and responsible. Throughout his career as a lecturer/Professor, he successfully supervised numerous students at various levels, i.e., B.Sc./M.Sc./Ph.D. He had made important contributions in his area of specialisation including being actively involved in Malaysian Mathematical Sciences Society, the Chief Editor of the MATEMATIKA Journal and he was a member in various committees at the national level vis-à-vis:*

- *Panelist on the Mathematics in Education Awards Committee MPKSN.*
- *Member on the Committee for the Accreditation of Qualifications in Science, Public Services Department;*
- *Member on the Advisory Committee of the School of Information Technologies, UUM.*
- *Member on the Advisory Committee for the Applied Science Programme, UIA.*
- *Setter of examination questions for the Advanced Mathematics T subject at the STPM level;*
- *External examiner for undergraduates at Universiti Kebangsaan Malaysia, Universiti Putra Malaysia and Universiti Sains Malaysia.*
- *Member of the working committee of the Malaysian Mathematics Association*

*Professor Mohamad Rashidi was often invited to be the guest speaker at various international conferences. He was awarded the "Pingat Darjah Kebesaran Setia Mahkota Selangor" in 1997 in recognition of his valuable contributions.*