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## DR. ROYOL CHITRADON

### EDUCATION

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#### 1991-1987

- Dr. rer nat in Informatics, Informatics Institute, Innsbruck University, AUSTRIA  
*Dissertation: Parallelization and Vectorization of a Finite Element Unsymmetric Equation Solver*

#### 1975 – 1979

- M.Sc. in Applied Mathematics, Mahidol University, THAILAND  
*Thesis: Maximum Flow Rate of BMA. Road Network, a Graph Approach*

#### 1972 – 1974

- B.Sc. in Mathematics, Prince of Songkhla University, THAILAND

### PROFESSIONAL EXPERIENCE

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#### 2008

- Subcommittee of Water Resource Management Monitoring for Economic Stability, the Economy, Commerce, and Industry Commission, the Thailand Senate
- Counselor of the Special Committee Board for Water Resource Management Issues, the House of Representatives
- Committee and Secretariat of Thailand Water Challenge 2008, following the King's Initiatives
- Committee and Secretariat of the Director Board for the Project of Multifunctional Monkey Cheek in Sanamchai-Mahachai Canal, Bangkok and Samutsakorn Province, the Chaipattana Foundation
- Counselor of the Committee Board for Water Shortage Area Analysis, Department of Agricultural Extension, the Ministry of Agriculture and Cooperatives
- Steering Committee for the Study of Royal Films and Photographs in H.M.K. Bhumibol

Adulyadej

- Counselor of the Committee Board for the Water Conservation Youth Camp, the National Council on Social Welfare of Thailand, following the King's Initiatives

### **2007- Present**

- Steering Committee for Water Situation Monitoring and Analysis in Suburb and Bangkok Areas in 2007, following the King's Initiatives
- Vice-Chairman of the Team for Multi-Functional Monkey Cheek Water Retention in Sanamchai-Mahachai Canal, Bangkok and Samutsakorn
- Subcommittee of Mitigation Plans for Water Shortages and Floods, the National Committee Board of Water Resources
- Steering Committee of both Government and Civil Society to Monitor the Government Work, the Royal Irrigation Department
- Committee of Director Board for Water Resource Management in the Suburban and Bangkok Areas, following the King's Initiatives
- Counselor of the Committee Board of Infrastructure, Communication, Public Transportation and Logistics in the Industries, the Federation of Thai Industries
- Committee of Technology Policy Development, the Thai Red Cross Society

### **2007-2008**

- Member of the Water Law Drafting Commission
- Committee and Secretariat of Thailand Water Challenge, As the Celebrations on the Auspicious Occasion of His Majesty the King's 80<sup>th</sup> Birthday Anniversary, 5<sup>th</sup> December 2007
- Chairman of the Team for Techniques and Academic Issues of the Lab Operation, the Ministry of Science and Technology
- Chairman of Water Law Drafting Team, the Water Resource Subcommittee and the Committee of Natural Resources and Environment, the National Legislative Assembly, Thailand

### **2007**

- Counselor of the 10th Conference on Nuclear Science and Technology
- Committee of Thailand Natural Resource Exhibition: Actual Public Gain

**2006-2011**

- Chairman of the Committee Board of Plant Genetic Conservation Project, following the King's Initiatives, Hydro and Agro Informatics Institute
- Committee of Plant Genetic Conservation Project, following Her Royal Highness Princess Maha Chakri Sirindhorn.

**2006- Present**

- Committee of the Director Board for Water Resource Management: Monkey Cheek Water Retention, Chaipattana Foundation
- Subcommittee for Land Use and Flood Prevention of the Water Resource Committee Board, the National Water Resource Committee Board
- Board of National Geoinformatics Committee
- Subcommittee of the Natural Resource and Environment Committee, the National Legislative Assembly, Thailand
- Counselor of the Water Resource Database, Rayong Province

**2006-2008**

- Counselor of Information Technology and Communication Development, Ministry of Public Health
- Subcommittee of Water Resources in Water Resource and Environment Committee Board, the National Legislative Assembly, Thailand

**2006**

- Committee and Secretariat Assistance of the 5th National Congress on Science and Technology

**2005-2007**

- Subcommittee of Information Technology System Improvement, Office of Auditor General

**2004-Present**

- Steering Committee of Thailand Refuse Disposal Technology Assessment (GITS)

**2004-2007**

- Counselor to the Director of Government Information Technology Services (GITS)

**2004-2006**

- Board of Plant Genetic Conservation project under the Royal Initiative of H.R.H Princess Maha Chakri Sirindhorn

**2001- Present**

- Steering Committee of Pacific Neighborhood Consortium

**2001- 2003**

- Representative of Thai Research Network of Asia-Pacific Advanced Network(APAN)

**2004**

- Chairman of Local Organizing Committee for AFITA/WCCA 2004

**1998**

- International Steering Committee of High Performance Computing Asia'98, SINGAPORE

**1997**

- International Steering Committee, High Performance Computing Asia'97, KOREA

**1996**

- Chairman of Computational Science and Engineering, University Consortium

**1995**

- International Steering Committee, High Performance Computing Asia'95, TAIWAN

**AWARDS RECEIVED**

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**2004**

- Grand Companion (Third Class, higher grade) of the Most Illustrious Order of Chula Chom Klao

**1997**

- Knight Commander (Second Class) of the Most Exalted Order of the White Elephant

## **PATENT**

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### **2006**

- Patent No. 20653: System and method for manipulating information and map for geographical resource management, issued on 6<sup>th</sup> October, 2006

## **SPECIAL PROJECTS AND RESEARCH**

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### **Present**

- Data Grid
- Mobile Telemetry System
- Geographical Information Infrastructure

### **Past**

- Reengineering PTT Lube-Oil Plant: A report presented to PTT Thailand. The study showed AS-IS functional model of Lube-Oil Plant by IDEF (IDentifying Functional modelling ICAM) method and TO-BE functional model for PTT. This study was regarded as the first step coming up to an Expert system of this organization.
- Gas Pipeline Simulation PTT Network: A report presented to PTT Thailand. The study showed the optimization method which could control the optimal pressure of gas network and the optimal operation of Paralleled Gas Pump System.
- Geographical Information System: GIS software development, GIS Simulation, Internet GIS
- Parallel and Vector Programming
- Shared Memory Parallel and Vector Computer
- Equation Solver for Linear and Non-Linear System, Directed Method
- In-Core and Out-of Core Equation Solver
- Optimization node numbering for a Finite Element System