

# Journal of King Saud University - *Science*

## Editor-in-Chief

**Prof. Omar M. Al-Dossary**  
Department of Physics and Astronomy  
College of Science  
King Saud University  
P.O. Box 2455, Riyadh 11451  
Tel.: 00966 -11-4676378 (secretary)  
Fax: 00966 11 4673656  
E-mail: omar@ksu.edu.sa

## Associate Editors

### **Prof. Ahmad H. Alghamdi**

Chemistry Department,  
College of Science  
King Saud University  
P.O. Box 2455,  
Riyadh 11451  
Saudi Arabia  
Tel.: 966-11-4676001  
Fax: 966-11-4675992  
E-mail: HYPERLINK "mailto:ahghamdi@ksu.edu.saEditor" ahghamdi@ksu.edu.sa

### **Prof. Abdulllah M.S. Al-Amri**

Geology and Geophysics Department  
College of Science  
King Saud University  
Saudi Arabia  
E-mail: amsamri@ksu.edu.sa

### **Prof. Omar M. Al-Dossary**

Physics and Astronomy Department  
College of Science  
King Saud University  
Saudi Arabia  
E-mail: Omar@ksu.edu.sa

### **Dr. Amal Abdulaziz Al-Hazzani**

Botany and Microbiology Department  
College of Science, King Saud University  
Saudi Arabia  
E-mail: alhazzani@ksu.edu.sa

### **Prof. Yousef A. Alkhamees**

Mathematics Department, College of Science  
King Saud University  
Saudi Arabia  
E-mail: ykhamees@ksu.edu.sa

### **Dr. Giovanni Benelli**

Department of Agriculture, Food and  
Environment  
University of Pisa, Italy  
E-mail: g.benelli@sssup.it; benelli.giovanni@gmail.com

### **Prof. Demosthenes Ellinas**

School of Electronics and Computer  
Engineering  
Technical University of Crete  
Greece  
E-mail: ellinas@ece.tuc.gr

### **Prof. Jun Ling**

Department of Basic Sciences  
The Commonwealth Medical College, Scranton  
USA  
E-mail: jling@tcmc.edu

### **Prof. Hatem Odah**

National Research Institute of Astronomy  
and Geophysics  
Cairo, Egypt  
E-mail: hatemodah@yahoo.com

### **Prof. Hari M. Srivastava**

Department of Mathematics and Statistics  
University of Victoria  
Canada  
E-mail: harimsri@math.uvic.ca

## International Advisory Editors

### **Dr. Marilena Carbone**

Universita degli Studi di Roma Tor Vergata,  
Roma, Italy

### **Prof. Asantha Cooray**

University of California, Irvine  
Department of Physics & Astronomy,  
4186 Frederick Reines Hall  
Irvine, CA 92697-4575  
Tel.: +1 949 824-6832

### **Dr. G. Dyke**

Department of Evolutionary Zoology, University of Debrecen,  
Debrecen, Egyetem ter 1., 4032, Hungary

### **Rizwan Irshad**

Ministry of Climate Change, G-5, Islamabad, Pakistan

### **Prof. X.J. Yang**

Department of Mathematics and Mechanics  
China University of Mining and Technology  
Xuzhou 221008, China