

**February 23, 15**

### **AGU 2014 Science for Solutions Award**

Dr. Chigomezzyo M. Ngwira, a Research Associate in the Department of Physics at The Catholic University of America, received the American Geophysical Union (AGU) Science for Solutions Award in December 2014 for his research on geomagnetically induced currents (GIC) under extreme geomagnetic conditions.

AGU is an international non-profit organization with a membership base of more than 62,000 geophysicists, engineers, and other related professionals from over 140 countries. The AGU Science for Solutions Award annually recognizes one student or postdoctoral scientist for significant contributions in the application and use of the Earth and space sciences to solve societal problems.

GIC arise in ground-based electrically conducting structures such as pipelines and electrical power grids. During extreme solar storms, large amplitude GIC can lead to failure of high-voltage electric power transformers, which in the worst case may cause electrical power blackouts.

Dr. Ngwira has been a Catholic University Research fellow since March 2012, and also serves as a science collaborator at the Community Coordinated Modeling Center operating within the Space Weather Laboratory at NASA Goddard Space Flight Center.

Born in Mazabuka, a small town in the Southern Province of Zambia, Dr. Ngwira received his doctorate in experimental space physics from Rhodes University in Grahamstown, South Africa, in April 2012.

He has been involved in GIC modeling studies for the past seven years, and was one of the lead members of the GIC research group in South Africa. He is the principal author and/or co-author of more than 18 peer-reviewed scientific articles.

## Acknowledgements

I am honored to have received the prestigious AGU award. I would like to offer my sincerest gratitude to the AGU for the honor established by Prof. Peter Schlosser. I also want to say thank you to Dr. Judith Karpen for the nomination, and to Dr. Antti Pulkkinen who has been my great mentor.

Numerous people have supported me along the way. I would like to thank Drs. Lee-Anne McKinnell and Pierre Cilliers my graduate school advisors, and many other people that have supported me during this journey. I am also blessed to have an amazing and loving family, especially my wife, Chomba, who has been very supportive of my work.

Lastly, I want to again say how grateful I am to have received the Science for Solution Award. I count it a blessing to work along-side many eminent scientists at NASA Goddard Space Flight Center.

Sincerely,



Chigomezyo Ngwira, Ph.D  
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USA.

Photo attached by The Editor.

See next page.

Dr Ngwira is wearing eyeglasses  
in this photo.

Congratulations, Chigo ! ... George.

