



GLOBAL EDUCATIONAL OUTREACH for SCIENCE, ENGINEERING and TECHNOLOGY

- A GEOSET Summary
B Example modules URLs: Undergrads, Graduate, Postgrads and Educators
C Example recording URLs from participating nodes in the US, UK, Japan and Croatia

A SUMMARY

GEOSET (Google geoset and you will find us) is a network of participating Internet nodes located in universities and related educational institutions contributing to a rapidly growing cache of easily accessed educational material packaged for classroom use anywhere in the world. Teachers can distill the material and use it in their own lessons and students can access the material directly too. The material already exists - we are simply repackaging it for global access to be used by every teacher on the planet. URLs to recordings are given in sections B and C below which give an overview of what we are achieving. It is one major way to exploiting the Internet for general outreach to schools. Students are also contributing and not only revolutionizing their resumés but improving their chances of getting jobs and scholarships immeasurably. The initiative is flexible as nodes use a wide range of recording approaches: Mediasite, Camtasia, Tegrity, Echo360, Polymedia, Accordent and YouTube

Participating nodes now: USx3, UKx2, Japanx2, Croatia, Hong Kong, Brazil and soon Spain and Chile.

Technical and General Information

More detailed information including technical information is at: http://www.geoset.fsu.edu/GEOSET_TECH/index.html

Contact Steve Acquah <sacquah@chem.fsu.edu> for details on how to record in dual window mode free

A general presentation on education and GEOSET

(57min): <http://mediasite.apps.fsu.edu/Mediasite/Viewer/?peid=1dd5f9e9c5734ebb9d7073f6dd7f3b071d>

GEOSET GATEWAY www.geoset.info (also includes links to www.vega.org.uk)

US Florida State University www.geoset.fsu.edu

UK Sheffield University www.geokri.org/presentations.php

JAPAN Toyo University <http://bionano.toyo.ac.jp/GEOSET/JPN/Top-seminars.html>

UK Brighton University <http://www.brighton.ac.uk/geoset/>

CROATIA Institute Rudjer Boskovic <http://geoset.irb.hr/> <http://www.irb.hr/users/bosanac>

BRAZIL aleonif@gmail.com : <http://www.landauglobal.co.uk/> : <http://www.youtube.com/landauglobal>

US Harvard <http://www.youtube.com/user/HSEASOUTREACH?feature=mhum>

US Ohio State University http://molspect.chemistry.ohio-state.edu/symposium_65/symposium/Program/WK.html

HONG KONG Hong Kong Technical University <http://videochannel.ust.hk/>

B SET FSU MODULES

B1 UG Vinnie LaBarbera - Beetles [Mediasite] Presentation all about beetles (and a bit about The Beatles!)

<http://mediasite.apps.fsu.edu/Mediasite/Viewer/?peid=bdc575f29384404782cae47867389fb3>

B2 UG Jennifer Goldsby - Inbreeding in Animals [Mediasite] Amazing story of inbreeding issues in a pack of wolves isolated on an island for 70 years.

<http://mediasite.apps.fsu.edu/Mediasite/Viewer/?peid=9395fec712714f01aa240efcbcd5518>

B3 UG Brittany Raffa - Benchmarking the Italian Health-Care System [Mediasite] report on the #2 Health System in the world according to the WHO.

<http://mediasite.apps.fsu.edu/Mediasite/SilverlightPlayer/Default.aspx?peid=2cdd3e586bea431baed3c7d3bfe9bcdb>

FEEDBACK - I was accepted to Dartmouth Medical School! Your help on giving me the opportunity to do the presentation was a defining factor. I went to Dartmouth in January for an interview and afterward I e- mailed the presentation to the professor who interviewed me. Thank you for the role you played in this.

B4 UG Daniel Stribling UG - Dynamic Molecular Simulation [Camtasia] recording with animations http://www.geoset.fsu.edu/presentations/stribling/dynamic_molecular_simulation.html

B5 PG Prajna Dhar - Motions at Interfaces

<http://mediasite.odd.fsu.edu/mediasite/Viewer/?peid=860b6b854d91443f97957787e28b1fc0he>

Prajna was the first grad student we recorded - the URL for her presentation was included in her reference for a postdoctoral position which she was awarded almost immediately. Her URL was also used later in references for a tenure track positions and she was offered four. She was told before an interview that the interviewers could see from her GEOSET recording that she could teach. FEEDBACK October 2011 "I wanted to let you know that our department just received funding to set up a Chemical Engineering Discovery Lab. I was asked to be involved in this project, and our Department Chairman mentioned how my work with the GEOSET led him to think of me as an ideal candidate to work on developing this lab directed at introducing the concepts of Chemical Engineering to middle and high school students.

B6 Kerry Gilmore PG Building Bridges with Organic Chemistry [Mediasite] Synthetic organic chemistry techniques Kerry is using to create extended carbon (graphene-like) network molecules. The URL for Kerry's recording was included in a nomination for a Fulbright Scholarship to Italy which Kerry won.

<http://mediasite.odd.fsu.edu/mediasite/Viewer/?peid=93aa9659299a495c8d9ed939cc25911f>

B7 Steve Acquah PDF - Invisible Ink 10-12 yrs [Mediasite] Innovative approach to Internet outreach

<http://mediasite.odd.fsu.edu/mediasite/Viewer/?peid=ad3c37ef61024da588f3209fd4a77e38>

B8 Colin Byfleet Practical Project Estimation of Large Numbers 10-12 yrs [Mediasite] Together with FSU Cornerback describes a simple method to estimate large number in this case the number of blades of grass on an American Football field.

<http://mediasite.odd.fsu.edu/mediasite/Viewer/?peid=15d49751e74a4f1691180d26766f1bd1>

B9 Steve Acquah Trailer for Steve's Internet Outreach Programmes Science with Acquah" 4-6 yrs Trailer an Internet outreach project for small school children.

<http://mediasite.odd.fsu.edu/mediasite/Viewer/?peid=3c3d7279617c4786b1166f22b566d8e2>

B10 Harry Kroto -Maps Concept Module 5-8 yr olds [Mediasite] Module for small children on representing the surface of a sphere (in this case the World) on a flat sheet of paper (a Map)

<http://mediasite.odd.fsu.edu/mediasite/Viewer/?peid=3a78c89820614455a836c834541f5f24>

B11 in SPANISH Zulma Gimenez GS "Quimica de Hornear el Pan" General [Mediasite]. Zulma is a graduate student at FSU who has also translated some concept modules into Spanish.

<http://mediasite.apps.fsu.edu/Mediasite/SilverlightPlayer/Default.aspx?peid=ed7d4a4be39a4f109d5578b99603bae61d>

B11 Russ Johnsen interviewed by Colin Byfleet Penicillin [Mediasite] First hand (!) account by one of the first people after WWII to have benefited from the use of penicillin to cure blood poisoning

<http://mediasite.odd.fsu.edu/mediasite/Viewer/?peid=76288d974dd4446883ddd1b9418031bf>

B12 Harry Kroto Lecture (+/- powerpoint) [Mediasite] Half a dozen very simple tricks of the lecturing trade

<http://mediasite.odd.fsu.edu/mediasite/Viewer/?peid=a32270d2a85945999441b2ff46d27ea0>

Non-FSU recordings

C1 UK SHEFFIELD UNIVERSITY Steve Banwart Weathering Science - how soils are formed [Echo 360] Description of the amazing complexity of soil and the critical role it plays in our lives.

<http://uecho.shef.ac.uk:8080/ess/echo/presentation/ae32fe7f-eee8-4b16-a0c4-a65c81743f5b>

C2 BRAZIL Alexander Fonseca (Brazilian Node) [Camtasia] A series of modules giving the solutions to problems from the Brazilian Mathematics curriculum

http://www.geoset.info/lecture_list.html?t=18

C3 JAPAN BioNano Center of Toyo University Noriyuki Watanabe in Japanese which got him a job at NHK

<http://webedu.sce.toyo.ac.jp/bionanosci/Viewer/?peid=bb794dd605ef48d2830437f30c9b1d8b>

C3.1 JAPAN – Indian researcher Saino Hana Vargheese, Nanotube based electrochemical biosensors now Ass Prof at the Mahatma Gandhi University, India;

<http://webedu.sce.toyo.ac.jp/bionanosci/Viewer/?peid=9fef08a7f1a34a5594fb0133f530ab24>

C4 CROATIA Danko Bosanac - Physics Module on Force and Potential (Croatian Node) [Camtasia] fundamental aspects of Physics which we tend to take for granted in teaching.

<https://www.irb.hr/korisnici/bosanac-dav/forcepotential/forcepotential/forcepotential.html>

C5 UK BRIGHTON UNIVERSITY Ray Whitby [Camtasia] - Performance Enhanced Novel Graphenes and Associated Nanocarbons. Ray surveys state of the art research in the field of carbon based nanostructures materials

<http://www.brighton.ac.uk/geoset/d/movies/research/pengana2010/pengana.html>

C6 US Harvard. Max Mankin 1 min on Titanium Dioxide (YouTube presentation)

http://www.youtube.com/user/HSEASOUTREACH?feature=mhum#p/a/u/1/Kimi_08XIY8

C7 US Ohio State. Jon Hougen Inimitable overview of the legendary Molecular Spectroscopy Symposium

<http://streaming.osu.edu/mediawww2/spectroscopy/062310d/real/main.htm#>

C8 JAPAN - Int Center for Materials Nanoachitectonics Jesse Williams ICYS/MANA Crystallographic study of wurtzite structured device materials

http://www.extide.mediasite.co.jp/mana_nims/Viewer/?peid=14148b3b14cf46bcd4c4e19eaf26a19

C9 Yokohama Science Frontier High School (YSFH)

<http://webedu.sce.toyo.ac.jp/bionanosci/Catalog/pages/catalog.aspx?catalogId=c0f4712c-4af1-48c1-9aba-047b4fe7b316>