

THE OU GEOLOGY AND GEOPHYSICS DEPARTMENT "WATER GUY" -DR. KATO TSOSIE DEE

UNIVERSITY OF OKLAHOMA WATER DAY

NOVEMBER 16, 2018

BACKGROUND

ACADEMIC PREPARATION

- B.S. GEOLOGY: UNIVERSITY OF KANSAS
- M.S. GEOLOGY: UNIVERSITY OF KANSAS
- PH.D. GEOCHEMISTRY: COLORADO SCHOOL OF MINES

PROFESSIONAL PREPARATION

- ENVIRONMENTAL CONSULTING (NEARLY 6 YEARS) AS A HYDROGEOLOGIST/HYDROGEOCHEMIST
- PROJECT MANAGER AND FULL-TIME FACULTY IN THE NATURAL RESOURCE MANAGEMENT PROGRAM AT COLORADO MOUNTAIN COLLEGE

THE "NEW" DISCIPLINE IN THE SCHOOL OF GEOLOGY AND GEOPHYSICS - HYDROGEOLOGY









CURRENT RESEARCH ACTIVITIES

- NATURAL ORGANIC MATTER (NOM) IN NATURAL WATERS
 - CURRENT FOCUS IN ALPINE WATERSHEDS
- ACID MINE DRAINAGE GEOCHEMISTRY AND TOXICITY
- FATE & TRANSPORT OF METALS IN NATURAL WATERS
- **BIOGEOCHEMISTRY OF WETLANDS**



Why Dissolved Organic Matter (DOM)?





[[]SRFA2011]"Sample - Blank Contour Plot"IA[1

GROUNDWATER/SURFACE WATER RELATIONS



Groundwater



FUTURE RESEARCH ACTIVITIES

- GEOCHEMISTRY OF ARTIFICIAL AQUIFER RECHARGE
- URANIUM FATE AND TRANSPORT
- EMERGING INTRINSIC GROUNDWATER TRACERS (I.E., ORGANIC MATTER, BORON)
- AQUATIC TOXICITY
 - EXPAND UPON CURRENT WORK





Uranium in the Salt Wash member near Cove, AZ

