

U.S. GEOTRACES Arctic Planning Workshop National Science Foundation 29 September - 1 October 2010

Workshop Program

29 Sept - Day 1 Stafford I, Room 1235

Continental breakfast at Comfort Inn Ballston Walk to NSF

8:30 Welcome and logistics Bob

- 8:40 Overview of GEÖTRACES -- Bob Anderson
- 9:00 Background and Goals for Arctic GEOTRACES -- Dave Kadko
- 9:25 Henrietta Edmonds -- NSF/OPP

Morning - The Arctic Ocean and GEOTRACES: key processes and sites, existing relevant US and international programs and activities (plenary session)

Convener: Peter Schlosser

International programs:

- 9:35 Roger Francois (Canada)
- 10:00 Per Andersson (Sweden)
- 10:25 BREAK
- 10:40 Michiel Rutgers van der Loeff (Germany)

US programs

- 11:00 James Swift- Arctic repeat hydrography and GEOTRACES
- 11:20 Richard Coffin Geochemical and geophysical investigation of deep sediment and permafrost hydrate deposits in the Beaufort Sea.
- 11:35 Brad Moran Overview of BEST and SBI
- 11:55 Peter Schlosser Overview of AON and other US programs-- ties to GEOTRACES
- 12:15 LUNCH

Afternoon: I. Tracers in the Arctic: key parameters, advocacy talks (plenary session

Convener: Bill Smethie

- 13:30 Mike Steele the future of arctic sea ice and ocean temperature
- 13:55 Lou Codispoti Nutrients and primary production in the Arctic

14:10 Advocacy talks (~5 min each)

Dennis Hansell: Dissolved Organic Carbon (DOC)

Brad Moran: Water column and sedimentary ²³¹Pa and ²³⁰Th Ken Buesseler: Short lived ²³⁴Th and ²²⁸Th measurements

Gillian Stewart: 210Pb and 210Po

Mark Baskaran: Role of Ice-rafted Sediments in the Biogeochemical Cycling of Key TEIs in

Surface Waters Using a Suite of Short-lived Radionuclides

Jim Bishop: Particulate TEIs

Nicolas Cassar: O₂/Ar NCP measurements

Jingfeng Wu: Seawater Pb isotope as a novel tracer for the Atlantic water flow path in the

Arctic

Dave Kadko: ⁷Be as a tracer of atmospheric inputs into the Arctic Surface Ocean Bill Landing/Greg Cutter: Atmospheric deposition of contaminant and bioactive elements, Asian

pollution (10-15 m)

15:00 Break

15:20 Afternoon: II. Plenary Discussion on topics, organization for breakout sessions Convener: David Kadko

(Henrietta Edmonds for) Kelly Falkner: R/V Sikuliag: Alaska Region Research Vessel (10 m)

Breakout sessions: Discussion on topics, organization -- leaders from organizing committee

17:30 Adjourn / Dinner on own

30 Sept - Day 2 Stafford II, Room 515

Continental breakfast at Comfort Inn Ballston Walk to NSF

8:30 Morning - Plenary: review and plan for the day / Convener: David Kadko

Breakout sessions: Discussion on topics, organization

10:30 Break

Breakout sessions: Discussion on topics, organization

12:15 LUNCH

13:30 Afternoon I - Breakout sessions: meetings and plenary discussion

15:00 Break

Afternoon II - Breakout sessions: meetings and plenary discussion

17:30 Adjourn / Dinner on own

1 Oct – Day 3 Stafford I, Room 1235

Continental breakfast at Comfort Inn Ballston Walk to NSF

8:30 Morning - Plenary: review and plan for the day / Convener: David Kadko

Breakout sessions: meetings and report drafting

10:30 Break

Breakout sessions: meetings and report drafting

12:15 LUNCH

13:30 Afternoon - Synthesis and planning for future action (plenary discussion)

Breakout sessions: meetings and report drafting

17:30 - Meeting adjourn

Possible breakout sessions

- 1) Identify the most pressing, exciting GEOTRACES scientific issues; --review of Delmenhorst meeting-are ideas presented there suitable for US scientific objectives? (so we do not necessarily have to re-invent the wheel)
- 2) Identifying possible collaborations with other programs to address these questions, in light of difficult and constrained logistics
- 3) Identify national and international GEOTRACES efforts to address these goals.
- 4) Discussion of small scale to larger scale opportunities (single PI, small groups on foreign vessels, dedicated US Healy cruises).