EXEMPLARY ALTERATION
OF CHEMICAL PROXY RECORD

PRE-MELTING
SIGNATURE

CONCENTRATION

POST-MELTING:
- RELOCATED PEAK
- REDUCED CONCENTRATION & SEASONAL AMPLITUDE
- PRESERVATION BIAS

NUCLEUS vs SCAVENGED LOCATION
PARTICULATE vs DISSOLVED STATE
ABSOLUTE CONCENTRATION

ICE GRAINS

(1) INITIAL CHEMICAL CONDITIONS

(2) SNOW METAMORPHISM
- SOLUBILITY IN ICE
- VOLATILITY
- TEMPERATURE GRADIENT
- ROUNDED vs HOAR CRYSTALS

POSITION OF IMPURITIES
WITHIN THE GRAIN NETWORK
CHANGES WITH TIME, DEPENDING ON:

(3) MELT PROCESS
- MELTWATER FLOW TYPE
- MELT RATE
- RAIN ON SNOW
- REFREEZING IN DEEPER LAYER OR DRAINING

ANNUAL SNOW LAYER