Science and Change: Hopes and Dilemmas

1. General Interest

. . . freedom and responsibility . . . weather modification . . . Viking results . . . frontiers of science . . . right to die.

2. Physical and Mathematical Sciences

. . . high-energy physics . . . solar physics . . . science and mathematics . . . software . . . remote sensing . . . synchrotron radiation . . . laser chemistry.

3. Energy

. . . wind energy . . . geophysical exploration . . . solar energy . . . renewable resources . . . nuclear energy . . . nuclear power and weapons . . . fusion.

4. Resource Policy

. . . recreational use . . . mineral policy . . . conservation . . . Rocky Mountain development . . . Indian lands . . . energy resource development . . . public domains management.

5. Biological Science

. . . herbivore-plant interactions . . . plant reactions to environmental stress . . . polar research . . . cell organelles . . . bioscience information . . . mathematical questions . . . theoretical biology.

6. Agriculture and Ecology

. . . biology and agriculture in China . . . food and pest losses . . . coyotes and meat production . . . wildlife survival . . . renewable resource management . . . high-altitude geoecology.

7. Environment

. . . environmental problems . . . benefit-cost analysis . . . nature and government . . . urban environment . . . Denver air pollution . . . regional air pollution.

8. Arid Lands

. . . American droughts . . . desert dust . . . reclamation of arid lands . . . management of dry lands—past and present.

9. Medicine and Health

. . . rural area services . . . orofacial motor control . . . behavioral research and training . . . organ transplantation and tumor immunity . . . financial incentives . . . medical decision making . . . pharmacokinetics . . . psychotropic drugs . . . health goals and indicators . . . perinatal factors . . . use of fluorides.

10. Anthropology

. . . man versus ape . . . development of primates . . . differences in human nutritional requirements . . . ethnoscience . . . migration in America . . . fertility control programs . . . folklore . . . American mountain people.

11. Technological Implications

. . . research in developing countries . . . appropriate technology . . . communication without paper . . . hand-held calculators . . . building ventilation . . . remote sensing from space.

12. Behavioral Science

. . . psychoanalytic research . . . creativity . . . individual differences . . . screening assessment . . . early intervention . . . cybernetic approach . . . families . . . encounter groups . . . somatosensory experience . . . violence.

13. Education

. . . minorities, women, and handicapped . . . multidisciplinary training . . . biological curricula . . . metric changeover . . . assessment of educational progress . . . interface with engineering.

14. Economic and Social Sciences

. . . U.S. economic growth . . . institutional limit to growth . . . interdisciplinary research . . . technological change . . . environmental issues . . . covert discrimination.

15. Science and Public Policy

. . . federal funds . . . information policy . . . public problem-solving . . . policy decisions . . . social science information in Congress . . . scientific knowledge and public policy . . . energy analysis . . . congressional fellows.

16. History and Philosophy of Science

. . . technology in retrospect . . . Martian centenaries—moons and canals . . . religious movements in America . . . Isaac Newton . . . human epistemology . . . information science . . . race, sex, and social theory.