TOPIC: TECHNOLOGY ADVANCEMENT GRANTS

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I. PROPOSALS RECOMMENDED FOR FUNDING

The following four proposals are recommended for full funding. All twenty proposals were rated by three separate reviewers. Each proposal had two reviews conducted by CCHE and the Colorado Department of Public Health and Environment and a third review was conducted by either the Office of Economic Development, the Governor's Office of Policy and Initiatives or various out of state university professors recommended by the National Science Foundation. In selecting which proposals to recommend for funding, CCHE staff assigned a point value to each overall review rating in the following order:

Poor	Fair	Good	Very Good	Excellent
1	2	3	4	5

The four proposals recommended for funding earned the highest reviews. Proposals that received a score of 13 and above have been recommended for funding. Staff believes these high standards will ensure that TAG funding is used to its greatest advantage and highest impact, with worthwhile projects which have a high potential of success being funded.

Proposal Number: 12050601
Title: "Viability of Engineered Fuel Briquettes From Biomass and Power Plant Waste Streams"
Principal Investigator: R. Malhotra
Organization: ICAST
Funding Request: $58,000
Proposal Score: 15

Proposal Summary: Proposes to evaluate the viability of commercially manufacturing engineered fuel briquettes composed of 40% fly ash and 60% biomass waste. Project is expected to produce economic, environmental and community benefits. Briquettes have already been produced in the laboratory based on prior research conducted over three years from a partnership between iCAST and CSU-P, CU Boulder and CSU Fort Collins.

Proposal Number: 12050610
Title: "Three Waste-to Value Technologies for Sustainable Urban Infrastructure in Colorado"
Principal Investigator: A. Ramaswami
Organization: CU- Denver
Funding Request: $155,000
Proposal Score: 13

Proposal Summary: Proposes three waste-to value technologies for urban sustainability in Colorado cities; high performance green concrete; zero waste and negative biodiesel processes; and converting organic municipal waste to energy. If the technologies were adopted they would make Colorado a leader in waste diversion and sustainability.

Proposal Number: 12050617
Title: "Durable Roof Tiles from a Fly-Ash/Tire Composite: Testing and Manufacturing Toward a Sustainable World"
Principal Investigator: P. Heyliger
Organization: CSU
Funding Request: $113,126
Proposal Score: 15

Proposal Summary: Proposed project focuses on refining the development of "green composite roof tiles" consisting of structural composite combinations of fly ash, the by-product of coal combustion in power plants, and ground up used tires. The project will: refine composite mixtures to find the most durable tile; produce enough for a real life test against benchmark standards for concrete roof tiles; conduct cost analysis for various production scales; and create a marketing and overall commercial strategy.

Proposal Number: 12050618
Title: "Expansive Foundation Soils Stabilized with Waste Tire Rubber"
Principal Investigator: J. Carraro
Organization: CSU
Funding Request: $128,913
Proposal Score: 14

Proposal Summary: Proposes to carry out original basic research to evaluate and demonstrate the feasibility of using waste tire rubber to reduce the swell potential of local expansive foundation soils from Colorado.