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Institute of Ecolonomics MSSU, Webster Hall Room 337-D 3950 East Newman Road Joplin, Missouri 64801

Robert D. Wood

Executive Director, Institute of Ecolonomics

Howdy Folks, welcome to the latest addition of Ecolonomics in Action. As many of you know there have been some changes in the IOE. We are currently in the process of transferring the IOE headquarters from Colorado to our office at MSSU, hence the delay in the newsletter.

Many of you may already know me, but for those who do not, please allow me to introduce myself. My name is Robert Wood and I am the new Executive Director of the Institute of Ecolonomics. Previously my position was Mid-West Regional Director with my office at Missouri Southern State University in Joplin, MO. We are located in Southwest Missouri in a region commonly known as the Ozarks. I tell you this because you will often be confronted with the pragmatic and common sense approaches that folks from around here are known for. Also people from the Ozarks have often had their general disposition likened to that of the famous Missouri Mule popularized by Harry S. Truman. I will admit to a stubborn streak, especially when I know what I am doing is right. I can tell you this in no uncertain terms, ECOLONOMICS IS RIGHT. We take educating people about Ecolonomics to heart here and helping people to reach the just and equitable goals of Ecolonomics is a personal and professional mission for those of us in the Institute of Ecolonomics.

I have been involved with the IOE unofficially and officially for nearly seven years. As a student at MSSU, I helped found the Student Ecolonomics Association (SEA) on the campus of MSSU and served as its first President. The organization has since reorganized as the International Student Ecolonomic Association (ISEA).

As of December 2005, I will hold a Master's Degree in International Affairs and Administration with a specialization in sustainable natural resource management. I am not what you would call a traditional student. After

serving in the US Army after high school in the late '80s, where I was stationed at the Pentagon, I spent some time working for the Defense Intelligence Analysis Center in Washington D.C. It was during this time I began working in the environmental field through training in hazardous chemical spill response.

About ten years after graduating from high school, I started college life at MSSU, where I was introduced to Ecolonomics through the certificate program. I took the certificate program and extended it out to become my major. MSSU allowed me to expand the course work of the Ecolonomics Certificate and graduate with a General Studies degree. I spent some time working in the environmental field as a consultant and instructor at Mid-America Environmental and then as a water quality officer for an Indian tribe in Oklahoma.

I have been slowly but steadily working toward my Masters Degree from Missouri State University. My goal has been to help build the IOE into an international organization helping people from all over the world benefit from the ideas

My philosophy about my new position with the IOE is very simple. I want to be of service to our members.

I would like the IOE to be a primary resource for people in business, government service, and the academic world. A resource that will help put the ideas of Ecolonomics to work for them.

To those ends we have already begun putting many pieces into place. In future issues you will learn about several projects that have already begun including one that sent Peter LaVaute, the new IOE board chair, to Brazil. We will make some changes to the web site and include a place for our new BLOG, which will hold some surprises in the

I look forward to hearing from our members for what ideas you might have, any compliments, concerns, or suggestions. Please feel free to contact me, our office number is (417) 625-9838 and my e-mail is instecolonomics@mssu.edu.

I thank you for the opportunity to serve.

SEPTEMBER/OCTOBER 2005

THE NEWSLETTER OF THE INSTITUTE OF ECOLONOMICS

VOLUME 8, ISSUE 5

Ecolonomics in Action

BRINGING ECOLOGY AND ECONOMICS TOGETHER

TIME FOR NEW BLOOD!

Gerry and I established the Institute of Ecolonomics in 1993. It was an exciting moment for us. We felt strongly that it was a principle that the world sorely needed to adopt... an idea whose time had come.

It was clear to us that business people and environmentalists needed to stop pointing their fingers at each other, as though there was an innate, unsolvable conflict between them, and work together for the common good. We realized that we do not have to sacrifice a strong economy for a healthy environment and vice versa. We can and must have both, for they are interdependent and both are essential for human welfare.

It has been said that there is a time and a place for all things; a time for planting

and a time for harvesting; a time to labor and a time to rest. There is also a time to pass the baton...a time for new blood.... a time to entrust the direction and leadership of the Institute of Ecolonomics in more youthful hands. The Institute needs a leader who has the vision, commitment, burning passion, and perhaps

most of all a leader who can give enough time and energy to ensure the successful

completion of the Institute's mission.

Peter LaVaute is such a leader. He has all of the qualifications and is not only willing but also eager to take the reins and serve as our next Chairman of the Board. Although I will remain on the board at Peter's request, and serve as best I can, I have stepped down as Board Chair.

Peter understood the importance of Ecolonomics, and lived by those principles, even before he knew there was an Institute. When he discovered IOE he donated \$100 and shortly thereafter showed up at my backdoor. I suppose he wanted to make sure his money was put to good use.

Peter had formed a for-profit company called Eco-Sense Solutions and was on a tour of the Southwest in search of technologies that could make what we now

refer to as Ecolonomic businesses...those that give us good jobs and a strong economy but at the same time honor and preserve our environment.

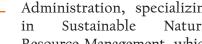
His for-profit meshed neatly with our non-profit and it wasn't long before he was an important member of

> the IOE Board of Trustees. As a matter of fact when our executive director had to tender his resignation for personal reasons beyond his control, Peter willingly jumped in and served as our interim Ex. Dir. until we could find a replacement. His passion for Ecolonomics has never wavered and I feel completely confident that he will be leading our team to new heights.

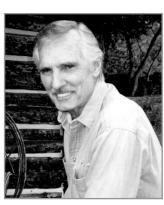
Perhaps the most important piece of our new team is our Executive Director, Rob Wood. Rob was in the first class to earn the Certificate of Ecolonomics offered by Missouri Southern State

University in Joplin, Missouri. After his graduation, he was immediately employed as the Water Quality Officer for the Eastern Shawnee Tribe in Oklahoma. In 2003 he chose to return to school at Missouri State University to obtain his Masters in International Affairs and

Administration, specializing in Sustainable Natural Resource Management, which



he will receive this year. He played an important role in working with the faculty and students at MSSU in expanding the Ecolonomic class, which will shortly be on-line and available for distance learning. As of the Spring 2005 semester there is a minor relating to Ecolonomics at MSSU, and a major will also be available in the not too distant future. Rob cut his Ecolonomic teeth as a student and a volunteer, and for the past year he has served as the Mid-West Regional Director for IOE. He has proven to be an invaluable player on the Ecolonomic team and it was with great pride and pleasure that we offered him the position of Executive Director of the Institute of Ecolonomics. Fortunately for us he accepted. With Peter and Rob heading our team the future of our Institute has never looked brighter.



IOE Founder Dennis Weaver

There is a time and a place for all things

THE INSTITUTE OF ECOLONOMICS

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The opinions expressed in Ecolonomics In Action belong to the writers and do not necessarily coincide with the views of the Institute of Ecolonomics. They are often printed to raise the level of debate on vital issues.

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Do what you can, with what you have, where you are. - Teddy Roosevelt

The mission of the Institute of Ecolonomics is to demonstrate that creating a mutually beneficial relationship between a strong economy and a healthy ecology is the only formula for a sustainable future.

"In nature, everything is connected; everything supports something else and at the same time is supported by something else-nothing lives in isolation. It is this interdependent quality that has allowed nature to survive indefinitely." - Dennis Weaver

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continued from page 6 Bean Jeane Manning is author of The Coming Energy Revolution (Avery Publishing, NY 1996) and Energie (Omega Verlag, Germany, 2002); and co-author of several other nonfiction books. She's published in five languages and has been interviewed by media on four continents. With honors, B.A., Sociology, she's been a social worker, reporter, counselor, publicist, radio commentator and newspaper editor. jeanmann@telus.net

continued from page 5 NBM

formed and chairs the Turkish chapter and later set up TUBITAK MAM (Scientific and Technical Research Turkish Futurists Association. Alphan Manas is also a Council/Laboratory of TURKEY Marmara Research member of TUSIAD (Turkish Industrialists and Center) Advisory Council. He became Honorary Businessmen's Association), Turkish Business and General Counsel of Cambodia in Turkey in 2005.

developing countries. Sustainable Development Association (Founding As a member of the World Future Society, he Member), The American Turkish Council, and the

continued from page 4 from it. Destitute farmers and their families can own a house trains farmers and buys their crop. Brazil recently mandated that at least two percent of its diesel fuel has to be biodiesel.

Brazil can run on a variety of fuels including alcohol. During the contrived international oil crisis of 1973, Brazil decided it wasn't going to depend on another country for fuel, so they put resources into their best alternative. This year alone, about 150,000 Brazilians got jobs out of the biodiesel program. I read an estimate that Brazil expects to create 400,000 jobs in the labor-intensive industry before 2008. The president of Brasil EcoDiesel, a company working with the Brazilian government (www.brasilecodiesel.com.br), points out that the castor bean induce the return to the land of the people who migrated to huge urban centers. It's about the farmer of the future, as in LaVaute and Weaver's vision.

subsistence crops normally cultivated in northeast Brazil. Its harvest begins during the drought season, when crops with a shorter growing cycle are finished. Lack of water actually aids the plant's growth. Are you listening, growers in semi-arid American states? Castor can grow alongside your other beans if someone helps you get it started.

LaVaute learned you could make 700 different products from castor oil. It's in lipsticks, hair conditioners and shampoo, and the colorful beans are polished to make rosary beads. Other uses range from laxative to skin softener to industrial lubricant. If you have evil intent, you could extract and concentrate the deadly toxin ricin, but that aspect has perhaps received more publicity than it deserves. LaVaute tells me you can make polymers and epoxies, for instance, from castor bean oil, and a minimum of processing makes it a diesel fuel. "It's an incredible oil and it's also a strategic material."

intensified. Rob Wood, executive director of IOE, uncovered documents about a neglected piece of American legislation that spells out how to build a castor industry just like LaVaute was talking about -- a basis for creating fuel, and value-added products. The Critical Agricultural Materials Act (CAMA) was passed in the early 1970s and amended several times including in 2005, but never implemented! It focuses on rubber and other critical agricultural materials, highlighting the one that could help replace much of America's oil imports-castor beans. The law considers castor oil as a strategic material because of its use as an additive for jet fuel and hydraulic fluid.

The crop was successfully grown in the U.S. in the past, but today, with no incentives, it isn't commercially grown. America depends on castor oil from India and China, with a bit coming from Brazil. Remember, we're talking about believes that if you go down the right track, the universe will a strategic material used in engines, vital to national security, at send you what you need to work with. He's obviously on track. a time when government leaders talk a lot about being at war.

of maybe 25 acres shooting off CAMA delineates what needs to be done to create and grow an industry around such a critical material. If implemented, the and its land if in ten years they've stayed with it and grown at law would provide structure to set up 10,000-acre plantations least fifteen acres of castor beans per farm. The government just for seed stock, for instance. In fact, the law says such actions must be taken!

LaVaute sparked a reaction to all this when he and Why would a government go to such lengths? At first Gherke were riding in a big diesel-fueled pickup truck, hauling it was just about energy independence. Brazil had been making a congressman to a fish fry. Congressman Frank Lucas, a alcohol from sugar cane waste for years, and all cars sold in rancher from Oklahoma who chairs an agricultural subcommittee, was their captive audience so they told him about the crucial-but-languishing Critical Agricultural Materials Act. It was about the time that China was trying to buy a big American oil company. LaVaute recalls that the congressman was disturbed that his country was so dependent on foreign oil while at the same time a law, intended to address that, has never been implemented. The congressman hit the roof, figuratively speaking.

LaVaute, who happens to be in the Missouri Farmers' settlements will prevent that country's agricultural exodus and Union, kept the momentum going. He met with his friend, the president of the union, who is on the board of the National Farmers' Union and who contacted other states' Farmers' Union presidents. They sent out information about CAMA's The oily castor bean can be planted along with mandate to fund new agricultural industries to ensure availability of strategic and critical materials. As serendipity would have it, the farmers groups had already planned to do a September fly-in to the capital.

> Usually these lobbies struggle to get legislators to write legislation so that farmers will have more alternatives and options. This time, legislation to give them such choices is on the books and just needs to be put into action. So the plan at this time-the end of August- is that on September II the movers-and-shakers from various states' farmers unions fly to Washington. Along with the three full-time lobbyists for the National Farmers' Union, they are to lobby every senator and congressman and insist they implement the CAMA law. Every legislator is going to be hit up to pick up the phone and say, "Why isn't this being done? It's already passed and it's supposed to be happening!"

It looks like this issue is a shoo-in; but if it isn't, Here's where the Re-Ruralization excitement LaVaute and Weaver have other avenues for nudging

> The farmers' unions are paying LaVaute's expenses to fly in and help organize the simultaneous lobbying. Then he's away to Brazil to study the castor bean industry. The USDA gogetter in Oklahoma is rounding up the first funding for LaVaute s trip, and Missouri Farmers' Union and private ranchers are also helping. Peter's filmmaker son, Colin LaVaute, will travel with him, to document the castor industry. Producer Rick Weaver, who produced Magnum, P.I., and other television episodes, will do post-production work on the documentary. Perhaps documenting China and India's castor bean industries will be among the Weaver and LaVaute families' future Ecolonomics projects.

LaVaute is definitely down-to-earth, but he also continued on page 7

Can the Castor Bean **Avert Fuel Wars?**

by Jeane Manning

It's time to get grounded, so to speak. We can't yet purchase the far-out energy technologies, but some down-toearth souls are introducing transition technologies that both ecologists and economists can welcome. That means both the business community and environmental activists can be happy, as is the case with the achievements of the Institute of Ecolonomics (IOE).

Film star Dennis Weaver founded the IOE in 1993. By the time this is in print, you may have heard news of an action sparked by the new chairman of the IOE's board of directors, Peter LaVaute. At New Energy Movement board meetings I met the man I now call "pragmatic Peter." He's Mr. Down-To-Earth in my mind, yet he's added a politically crucial agenda item to a Farmers' Union executives' fly-in to Washington DC on September 11, 2005. At this time it looks like a 400-person fly-in, with LaVaute as a consultant in the thick of simultaneous-lobbying action that week. By September 27th he'll be in Brazil studying its successful biofuel program that

could be copied back home in the American Midwest, big-time. It's all based on castor beans.

Energy-related developments are evolving fast in LaVaute's life, but years of quieter

efforts with his company, EcoSense Solutions, laid the groundwork. (Dennis Weaver and family are now co-owners of Ecosense Solutions, LLC.) The pace accelerated repeatedly this year- for instance when LaVaute and Weaver were handed the keys to Crane, Missouri, a town which they envision becoming the first Ecolonomic city.

Let's back up to find out why the lowly castor bean started hanging out with film stars, and why that particular bean could undermine the argument for oil wars. We'll look at what Weaver and LaVaute are up to.

Briefly, both men have roots in the Midwest, and care. They see people streaming away from rural communities, yet farm family life and rural communities traditionally provided a stable foundation for society. So the IOE and EcoSense Solutions came up with a plan -- Re-Ruralization. It starts with assessing resources - what's locally available that a community can turn into job-creating businesses while preserving a healthy environment. As with the Weavers' own home built out of abandoned tires and cans, a region can take troublesome waste materials and turn them into resources. Each community gets a "positive action plan" for producing electricity, liquid fuel, housing, and food locally, and producing value-added products to sell outside the area. Crane, Missouri, in an economically depressed rural area, is a good place to start; they're also working with the Northwest region of Oklahoma.

It's time to get grounded,

so to speak

How did they get their Re-Ruralization program into such a large area? LaVaute points to Tom Lucas of the U.S. Department of Agriculture's Resource Conservation and Development branch as an "organizational powerhouse;' he's implementing it. LaVaute sees Lucas as a natural Ecolonomist, and he's now on the IOE board of trustees. I include this because readers might be doing grassroots organizing themselves -- perhaps an energy cooperative. Don't underestimate your neighbor who works for the government.

In Crane, the plan includes a large building to house an "ecolonomic incubator" -- a commercialization center. The incubator checks out innovations that might solve environmental problems while creating new businesses. If inventions test out, they'll be helped toward the marketplace. LaVaute's group has a head start on the incubator, using a large rented workshop space.

Which brings us to the beans, or almost there. He and his EcoSense engineer, Russell Gherke, decided hydrogen is neither an efficient nor sustainable route to energy independence at this time. LaVaute researched alternatives including biofuels. He likes the thought of growing crops that take carbon dioxide out of the air and transform it into oxygen before being burned for fuel, but he found the alcohol fuels to be saturated with politics. Corn growers successfully lobby for incentives to make alcohol (ethanol) plants, but other

> powerful lobbies make sure we can't use more than a small percent of alcohol in our gasoline. Researching biofuels, LaVaute learned why our soybean growers created the soy biodiesel

industry - they had surplus oil, from crushing beans for soybean oil meal for livestock. Even supplying the fast food industry didn't create enough demand for the oil. Could it be sold as fuel? Due partly to singer Willie Nelson and his biodiesel campaign, truck stops would really like to pump biodiesel for truckers. Truck stops chains, however, won't promote a fuel unless assured of a constant supply. Meanwhile, soybeans are only about 18 percent oil. And in a National Renewable Energy Laboratory survey, soybean crushers were asked if they would continue to crush soybeans if there weren't a market for the meal. They replied that it was unlikely. This reduces soy biodiesel to being a byproduct dependent on the demand for soybean oil meal. Although LaVaute appreciates soybean growers for pioneering a supply infrastructure for diesel-fuel-from-agricultural-sources, he realized the scenario isn't the best "ecolonomics" model.

So he researched which crop is best to be grown specifically for fuel, not as an afterthought. "I've come up with a number of them," he told me, "but the one that just blows you out of the water is castor bean. Some varieties being grown in Brazil are 42- to 48 percent oil. There are reports of beans in the 60 percent range."

He learned that Brazil has new social programs set up in its semi-arid northeast: The government builds houses in a huge circle. Each house has a strip

continued on page 6

Re-Ruralization:

Bringing America Home

Doing what is right for the present and the future. A step forward. Brought to you by EcoSense Solutions, LLC. and The Institute of Ecolonomics.

There have been many predictions pertaining to the explosive growth of Earth's population. According to a 2004/05 UN-HABITAT report, the world's urban population will grow from 2.86 billion in 2000 to 4.98 in 2030. Where will they live? About 60% of the world's population will live in metropolitan areas. The report suggests that potential urban growth is close to one million people or a city the size of Pittsburgh every week.

Where do most of these people come from? Rural Communities. The US Population has been steadily streaming from rural areas to urban areas for many years; thus creating an incredible drain on rural communities in the United States. This trend has also accelerated in many developing countries and there are many reasons for this migration. In some regions the primary reason has been the onslaught of globalization. As developing nations try to follow the example of more developed nations of the world and lower trade barriers, many rural families are finding themselves unable to compete with agricultural products imported by wealthier nations who subsidize farmers. In India, for example, many farmers who have tried to compete with US wheat farmers are unable to compete. When farmers in a developing economy try to compete with products coming into their country, they simply cannot. With their livelihood taken away they tend to migrate toward larger urban areas looking for work. In many places the influx of people to urban areas simply overwhelms the capacity of limited infrastructure, both physical and social. This causes a marked increase in environmental degradation and a deeper level of poverty.

Throughout human history farmers and rural communities have been the foundation upon which every other great achievement has been built upon. Reversing the urban movement of our fellow citizens and assisting them to re-locate back to the country must be one of the paramount goals of our society today. We must slow the rapid growth of urban sprawl and environmental degradation, and re-vitalize Rural Communities. Our primary goal of Ecolonomic development must use this cornerstone idea as the foundation of a new global movement toward a better future for all people.

What is Re-Ruralization? Re-Ruralization is a

Positive Action Plan with the ability to be implemented in the real world to create opportunities for rural communities of the World. It is beginning to usher in a new era of Prosperity without Pollution!!! Re-Ruralization programs will be able to help local farmers and rural communities work with new crops that may not be destined for the world market, will enable them to not only continue to make a living off their land but also to reverse the steady stream of people heading to large urban areas.

In any rural area we start with an Ecolonomic Resource Assessment to see what is locally available in terms of natural resources, waste stream, agricultural, forest and industrial by-products to name a few. Technologies that utilize these resources as feedstock are identified and prescribed. The Positive Action Plan developed from this information will become the longterm foundation of a new sustainable economy. This will be a combination of a natural/cultural resource inventory that takes into consideration any native or non-native agricultural crops that could be used for local energy production as well as crops with food and industrial yield.

How do we make it happen? Local Production will equal Economic Benefits and the money the residents pay for all goods and services that are locally produced stays in the community and circulates.

EcoSense Solutions and the Institute of Ecolonomics have long sought to help create a more secure energy profile for the United States and the World. Through our collaborative efforts we have begun working within the framework of the Critical Agricultural Materials Act as it has been amended through 2005.

Under this act several agricultural materials have been deemed vital to national defense yet we tend to rely on other countries for crops that could be, and in some cases have been successfully produced in the United States in the past.

One such product is a lubricant derived from sabic acid that is used as a lubricant for some of our military planes. This product has been deemed a Critical Agricultural Material by the U.S. government. It comes from castor oil extracted from the castor bean, which until the early 1970's was grown and processed in the U.S. Currently all our castor oil is imported, primarily from China, India, and Brazil. This is a product with literally hundreds of uses for industry in the United States beyond the specific need for our

One of the most important aspects of the castor bean is the amount of oil available from the plant. The potential for castor oil derived bio-fuels is far greater than the current yield from soy bean oil because the

castor bean produces a much higher percentage of oil, by weight, than the soy bean does.

Action Plan of Re-Ruralization. This plan addresses five basic Ecolonomic areas needing development in order for a rural area to become secure, prosperous, healthy, The system takes the best technologies for electrical and independent.

- dependence on foreign oil.
- technology to reduce dependence on the insecure and antiquated grid system.
- 3. Develop local production and processing of food.
- 4. Develop housing systems utilizing local materials and labor.
- 5. Develop a range of value added products that may be produced from the resource base that may be marketed outside of the area to bring in capital.

The Good Steward Living System is at the heart of Re-Ruralization, it is a system designed for people Crops such as the castor bean and others with who want to be responsible for their path on this planet high energy potential are the lynch pin of the Positive and live in harmony and comfort. It is one facet of a multi-faceted program to regain the HEALTHY link with the earth upon which we depend for all of our needs. production and storage, clean water supply, wastewater 1. Develop liquid fuel production locally to reduce management, climate control, as well as low embodied energy in the whole system. This will be a dynamic and 2. Production of electricity with renewable ever evolving one as new technologies are brought on line to be integrated into the system should they be found to be superior to the existing system for that particular function.

New Board Member Alphan Manas

I would like to introduce you to our newest mem ber of the IOE Board of Directors.

Peter LaVaute, longtime advisory board member Russell Gherke and I met with Alphan Manas in Springfield, Missouri recently. When Peter and I began explaining the mission of the IOE to him, his eyes lit up. It was obvious to all present that we were on the same page. Alphan was invited to become a member of the Board of Directors and he accepted with no hesitation. Alphan is a great addition to the board and has wasted no time coming up with opportunities for the IOE to take a more active role in the international arena.

Alphan Manas was born on July 30th 1962 in Izmir, Turkey. In 1983 he graduated with a degree in Textile and Apparel Engineering from Egean University. The following year he went to New York and got his Master's degree in Production Management from State baby boomers to Gen-Z while developing ideas University of New York in 1987.

He worked as a Production Manager at the New York factory of Tenba, a camera bag and specialty handbag manufacturer, and in 1987 he returned to Turkey as Country Manager of the Colonial Corporation. Colonial Corp. was part of a Fortune 500 Apparel giant, a supplier to American department store chains such as Sears, K-Mart, JC Penny, and Wal-Mart. A year later he became a co-founder of Teknoloji Holding's first company Exim Corp. and has been Co-Chairman of Teknoloji Holding's board of directors.

Alphan has lead and participated in several important infrastructure projects in Turkey at the government level and helped related organizations for the preparation of bills, communiqués, and decrees. Such projects included the source Bar Coding of pharmaceuticals, the Electronic Highway Toll Collection System, the 1997 Census Project, Automatic Meter Reading (AMR) system based on mechanical meters and last but not least; the roll out of "Sports Betting and Horse Racing" wagering via GSM, iTV, Internet and IVR platforms.

Alphan is also a self-taught futurist. He is a prolific inventor, industrial designer and spends most of his time lately conceiving of and devising inventions on various scales that entail the use of innovative technology. In Alphan's role as a social engineer, he endeavors to find ways to advance ideas for the betterment of society. His designs range from households, safety, everyday products, and the redesign of existing products that have not been touched for decades. He closely evaluates generational trends, from continuously to serve and bring better life-style, living environment, and products to citizens of today and in

With an expertise in technology, Alphan has recently based his probes on renewable energy, transportation, housing technologies, and other emerging technologies that promise a great future for not only today but also for future generations. Alphan works closely with State and University Laboratories, tech start-ups and others in Turkey and the US, to continued on page 7 realize projects for