QE Chemicals, Inc.

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To: Joint Ways and Means Subcommittee on Transportation

From: Donald A. Upson, CEO, QE Chemicals, Inc.

Re: HB 5028, Business Oregon Budget

As an entrepreneur in Eugene, OR working to commercialize technology coming from the Chemistry Department of the University of Oregon, I would like to provide my perspectives on the support needs for start-up business development in the southern Willamette Valley in general, and on the Regional Accelerator and Innovation Network (**RAIN**) proposal in particular.

First, it seems very appropriate that the RAIN proposal will be considered along with proposals from the Oregon Research Collaboratory (ORC) and the Oregon Metals Initiative (OMI). The goals for economic development are similar and in some ways mutually supportive, while the focal points of the three programs are different.

Second, I want to acknowledge the outstanding elements of a thriving entrepreneurial ecosystem that already are in place and serving to promote entrepreneurship. The following is a partial list:

- Universities of Oregon and Oregon State, their technology transfer offices, and business schools
- Chambers of Commerce of Eugene, Springfield, and Corvallis
- SmartUps, SmartUps Academy, and SmartUps Day One
- ONAMI, BEST, and OTRADI
- Willamette Angel Conference
- Linn-Benton and Lane Community College Biz Centers
- I'm sure there is more that I'm not aware of that also contributes

To energize new business creation emanating from the South Willamette Valley, and most particularly from the university system, I believe that the following areas need to be addressed:

- **Education of Faculty** regarding how to evaluate their expertise in relation to **Problems** that their expertise could **Solve**, and evaluation of the **Value** that their solution could create. Impressive research gets accomplished and published, but there is often little effort to connect the developed technologies with their business potential.
    - **Recommendation 1**: Remind faculty no less than annually of the importance of submitting invention records prior to publication or presentation. How many good ideas get published or presented without taking that step, and the opportunity to create **Intellectual Property** is lost?

- **Recommendation 2**: Create a learning module covering the concepts of Problem, Solution, Value (in light of substitutes), and Intellectual Property and make it mandatory that any faculty member with a grant complete the module. Ideally, the module is an in-person workshop so that the faculty can ask questions and learn as much as possible in 1 day or less. Some variation of SmartUps Day One could serve this purpose.
- **Recommendation 3**: Create more advanced modules that will serve as refreshers for the original module (Rec. #2) as well as advance the understanding of the faculty.
- **Recommendation 4**: The best start-ups retain a close relationship with the inventor, and start-ups where the inventor has committed to such a close relationship would be ranked much higher than those that do not.
- **Recommendation 5**: Utilize the existing Technology Transfer Offices to triage the commercial potential of the discoveries coming from the University system. The TTO's will need private sector consultants with domain expertise to join that effort so that critical questions around Value relative to substitutes, Business Model and the like can be asked and answered. Rank all ideas for commercialization readiness.
- **Recommendation 6**: Mobilize the Business Schools at each University to do a "deep dive" on the 2-4 top-ranked commercial opportunities each year. This will provide an initial market analysis and validation, and also serve a valuable educational end.
- **Recommendation 7**: Report to faculty the results of the triage and market analyses as part of their on-going education, and have a very public celebration and recognition of the projects and inventors that will move to the next stage of commercialization.
- **These recommendations could be done with short lead time and modest expense**.

- **Entrepreneur Hired Guns**: Professors generally do not make good Entrepreneur CEOs. There are exceptions, but in general, professors want to be professors focused on their area of research expertise, and don't have the business background or interest to be entrepreneurs.
  - **Recommendation 8**: Identify and continuously build a stable of Entrepreneurs that:
    - Confirm the business potential determined by the TTO and Business Schools
    - If confirmed, lead the new company (NewCo) for a period of 1-2 years to get it off the ground and set NewCo up for success or, if not possible, shut it down.
    - Build the team.
    - Identify, hire and mentor a new CEO to take the company forward, while the "hired gun" possibly maintains a position on the Board of Directors of the NewCo to provide continuity and on-going mentorship.
    - The hired gun goes back into the stable and does it again with the next company.

- **Facilities and Services**: Start-up companies need a modest amount of low-rent space until they are able to generate income, grow and find more permanent space. However, not all space is adequate for every start-up. As the leader of Chemistry-based start-up, there is very little space in the Eugene area where adequate fume-hood facilities are available. If my business were to grow, we would either need to build new space in Eugene (very expensive) or move elsewhere

to take advantage of existing, available space. In addition, communities of entrepreneurs are more successful than individuals. Sharing problems and solutions, having access to common services would be helpful to any entrepreneur.

- **Recommendation 9**: Regions must decide if they will have/create space available that can accommodate various types of specialized businesses. Some specialized space that could be developed in an incubator, or consciously rejected, includes:
    - Chemistry fume hoods and the associated air handling
    - Biology containment facilities for higher-bio-hazard work
    - Physics – low vibration space may be needed
    - Canvass all areas that historically have generated businesses and learn their specialized needs, if any.
- **Recommendation 10**: Create a clearinghouse to <u>identify un-used, available space</u> that might exist in current South Willamette Valley businesses. Provide, perhaps as part of the program, or perhaps paid completely or partially by the start-ups, some liability and other insurance if that space is used by start-ups.
- **Recommendation 11**: Have an incubator/accelerator in one building and bring together entrepreneurs to foster interactions and sharing, and increase the chances for each company to ask the critical questions, get the answers from peers and advisors, and find a path to survive. This, of course, is what RAIN seeks to do, and it is very important.
- **Recommendation 12**:
    - Identify service providers (Legal, Accounting, Experienced Entrepreneur consultants, etc.) that serve the incubator/accelerator residents.
    - Consult with Portland (or other) incubators to ensure all the needed/desired service provider types have been identified.
- **Recommendation 13**: Manage the Incubator/Accelerator by a full time person who will run it like a business, weeding out weak companies, providing excellent support services for most, and kicking companies out when they are ready to "graduate." Set criteria for entry, for progress (not allow the "living dead" to stay), and for maximum size before graduation.
- **Recommendation 14**: Provide an on-going series of training seminars and workshops.
- **Recommendations 11 and 13 are the expensive part of setting up this system**, and would need to be carefully managed.

- **<u>Money</u>**: Raising money is not a skill that most first-time entrepreneurs have developed. Yet, they need to learn. Professors are generally good grant writers, and can help, but most are less tuned into the specifics of SBIR and STTR grants.
    - **Recommendation 15**: Much if not most university technology is too "raw" to qualify for Angel or VC money. Therefore, entrepreneurs need to apply for grants (SBIR/STTR and similar non-dilutive grants). However, grant-writing and grant management is a skill to be learned, and having at least one experienced SBIR/STTR grant writer assist entrepreneurs would lead to a higher grant success rate.

- **Recommendation 16**: Have experienced entrepreneurs mentor the new entrepreneurs to learn the "ropes" of equity and debt fund-raising, and connect them with appropriate sources of capital.
- **Recommendation 17**: Provide entrepreneurs with training in creating effective investor presentations and business plans. These can fit under the training/workshops mentioned above.
- **These recommendations require identifying people who are very good at each of these tasks, but should be relatively easy and inexpensive to implement.**

- **Synergy:** If synergies can be identified, evaluate and, if appropriate, exploit.
  - **Recommendation 18**: Look for opportunities to leverage South Willamette Valley entrepreneurial efforts with those of OHSU, PSU, OEN, OTBC, Portland 10, PIE, TIE, OAF, and other Oregon organizations and entrepreneurial businesses where business ideas are being developed, and with the ORC and OMI initiatives.
  - **Recommendation 19**: Sponsor a "Start-Ups Day" conference every year that brings together NewCo's from incubators in Portland, Corvallis, Eugene and elsewhere in Oregon. There could be keynote speakers, talks by selected companies, by Tech Transfer groups, and networking. There could also be a "Reverse Showcase" in which large companies talk about the business capabilities that they are seeking to acquire.
  - **Recommendation 20**: Create a Website that describes each of the businesses being developed, and advertise this website periodically to all businesses in Oregon. Business development up to and including mergers and acquisitions may emerge.

- **Sustainability**: Any efforts will be wasted if the program developed isn't designed to be sustainable, meaning that an on-going source of funding can be identified. However, it must be recognized that "seed" funding for a period of time will be needed.
  - **Recommendation 21**: Collect value for value provided. Companies can be charged competitive rents, plus a management fee to offset the costs of providing this enhanced ecosystem. They can provide their own insurance. Companies that "graduate" from the Accelerator (due to success) might be contractually obligated to pay a "royalty on sales" to the Accelerator as a way to pay-back for the benefits of being in the Accelerator, and to provide Sustainability.
  - **This is the recommendation that was added on 4/10/13**.

- **Recommendation 22**: Create a group to prioritize these recommendations and those received from all other providers of testimony to create a cohesive plan for action.

Taken together, the ecosystem for supporting new business startups will be greatly enhanced if these recommendations are acted upon.