Community initiative to transcribe the POET Technologies conference call on 2016-10-14

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This document comprises the community effort to transcribe the above POET Technologies event. Please participate and transcribe some paragraphs for everyone's benefit!

Status: in progress, almost completed.

You can find the recording here:

<u>https://drive.google.com/open?id=0B3ivK4eeO-1QNzhneFBZNnRWb2M</u>. It is our reference for timestamps. The POET investor presentation is here:

http://www.poet-technologies.com/docs/presentations/poet-investor-presentation.pdf.

Please go to the transcript below, locate any gaps, i.e. those places that have not yet been transcribed, listen to the audio recording, and type into this document one or the other paragraph that is missing.

You can also go to a spot someone else has marked in yellow – meaning the transcriber isn't quite sure about the result. Listen to the recording, try to help clarify the transcript, and – if successful – remove the text's yellow background. Please mark text in yellow yourself if you think something isn't clear.

Please be careful and accurate! If you don't comprehend something, please avoid any wild guessing, but rather insert three dots or three question marks and mark them in yellow if you know how to do that. If you don't know how to do such formatting, please enter some explaining text as a *comment* (outside the text body), or – if all else fails – as a remark in square brackets within the text body.

The transcript might still contain typos, wrongly transcribed spots or might have other issues. Please proof-read the document by comparing it to the recording and correct any mistakes!

The more people participate, the less burden will rest on the individual's shoulders, and the quicker we will be done.

Please observe the technical hints for editing listed below!

Technical hints for editing

- If you want to edit anonymously, please make sure you signed off from your Google account or use a "private" window for editing.
- Your changes will appear as suggestions. I (Rainer) will review and consolidate them.
- Preferably use [Ctrl]+Z to undo your most recent edits you want to have undone.
- Please enter timestamps as you see fit. If you can manage to keep the colors great!
 The best way to do so is to copy an already formatted piece of text and modify it accordingly.

POET Technologies Conference Call

00:00:00 – Operator: Welcome to the retail investor call hosted by IBK Capital. Today's call is titled Integrated Photonics: The Next Wave in Photonics Growth. Before we begin please note that this presentation does not provide full disclosure of all material facts relating to the securities offered. Investors should read the final base shelf prospectus, any amendment and any applicable shelf prospectus supplement for disclosure of those facts, especially risk factors relating to the securities offered before making an investment decision. Also, because there is a presentation associated with the shelf prospectus there will be no question and answer session today.

00:00:40 – **Operator:** Today we are joined by Dr. Suresh Venkatesan CEO of POET Technologies. But first I would like to turn it over to Mike White from IBK Capital.

00:00:53 – **Michael White:** Good day to all on the call. My name is Michael White and I am the President and CEO of IBK Capital Corp., an independent investment bank with 27 years of history offering a full range of financial advisory services. We have faithfully served POET Technologies for over 10 years having raised about 42 million dollars for the company over that time.

00:01:16 – POET is poised for great success. It is on the verge of successfully commercialising its highly disruptive, fully integrated, gallium arsenide based opto-electronic chip, including the VCSEL. The commercialisation of any technology, regardless of how disruptive, requires a team of talented and experienced people working very closely with partners and customers. These partners and customers need to depend on POET to manage the risk of product development, production and delivery. POET's acquisition of Denselight and BB Photonics propels the company forward in this regard. The two companies have integrated very well with POET and

established an aggressive roadmap to ramp up revenue by attacking readily addressable markets in photonic sensing and data communications.

00:02:17 – Denselight brings sizeable customers that have established trust including notable names like Honeywell and Molex. It is this combination of trust, reliability and a roadmap of innovative products to give future partners and customers the comfort to commit to POET. As Suresh has mentioned in the past, there are many potential partners interested in POET's products, a number of whom are Fortune 500 companies and although there is always risk in revenue growth it will be these relationships that propel POET forward and create value back to the corporation.

00:03:00 – Total focused addressable markets for POET have \$3.5 billion in size, ancillary markets are trillions of dollars in size. It will only take a few key partners and customers to rapidly grow POET's revenue. An example of this revenue growth in the public market today is Acacia Communications, a silicon photonics company. Five years ago it had eight customers and little revenue, now it has 25+ customers, \$250 million in revenue and a market cap of about US \$2.2 billion.

00:03:41 – We are excited for POET's future. This call is the first roadshow event that includes Europe and Canada next week and the United States the following week.

00:03:54 – As announced in press release, POET has proposed a public offering, Rodman & Renshaw is acting as lead book-running manager for the offering in the United States and Cormark Securities is acting as lead manager in Canada. IBK Capital is co-manager in Canada. Presenting today is Suresh Venkatesan, a well-experienced semiconductor executive with 25 years of history with Motorola and most recently with GlobalFoundries. His experience is in technology development and communication, he leads the POET team very well, having rapidly integrated and aligned POET and its recent acquisitions of BB Photonics and Denselight. Ladies and gentlemen, on the call, I now turn it over to Suresh Venkatesan, CEO of POET Technologies.

00:04:52 – **Suresh Venkatesan:** Thank you, Mike, for the introduction! I would like to welcome everyone today and thank you for joining us. As all of you know earlier this week we announced the proposed offering of our common stock which we will be marketing in the coming weeks. We wanted to take this opportunity to provide an update and an overview to our shareholders. I would like to take this time to thank all of you for your continued support.

00:05:19 – I know many of our retail investors have been inquiring about a company update to our prior statements regarding early in the fourth quarter. As such I would like to provide a quick update before going to the presentation, with a more detailed updated planned for the end of November in conjunction with our third quarter earnings call.

00:05:39 – Let me first start by clarifying prior statements to bring more clarity to our product plans and targeted milestones. First please note that there has been no meaningful change to the timeline for the commercialisation of POET's integrated laser technology, including the

VCSEL, which is expected in 2018 and will be targeted at Active Optical Cables, AOC applications. To date, no fundamental issues with the technology have been discovered, the company continues to work through technical hurdles related to the continued development and optimization of layers on the epitaxial stack.

00:06:20 – As discussed in our MD&A, product development and commercialisation timelines can also be contingent on outside factors, such as the export control licences and lead times required to manufacture and transfer epi-material to an international 3rd party foundry. This was previously indicated in our MD&A.

00:06:43 – It should be noted that there is typically a gap of time between successfully demonstrating a functional device and commercial revenue from volume production. Between these two milestones there is additional product optimization, customer evaluation, customer qualification and ultimately establishing distribution channels, that also needs to take place. It is important to know that POET's recent acquisition of Denselight has accelerated the company's path to establishing sales & distribution channels for the end product. As a result, despite the product development and optimization delays, we currently believe that we've maintained the original expected timeline for commercialisation of our integrated laser technology and AOC applications. We continue to be excited about the disruptive potential of our integrated laser technology as well as the company's ability to be able to commercialise and monetise this technology. With that, let me now begin.

00:07:52 – First, please note that POET technologies recently filed a final base shelf prospectus, and I would encourage you to refer to that filing for a full list of risks and disclosures prior to making an investment. Additionally, these slides as well as my comments may include forward-looking statements and therefore I would encourage you to read the complete safe harbor as detailed on slides 2 and 3.

Slide 4

00:08:27 – Let me give you a brief summary of what our proposed offering is. We intend to offer newly issued shares of POET's common stock along with warrants to purchase common stock. We expect to price the offering in late October or early November. We plan to use the proceeds from the offering for general corporate purposes, which may include increasing working capital, further product and business development, as well as potential future business or intellectual property acquisitions in support of our strategic goal.

00:09:05 – One of the areas we will be looking at closely is to get more control of our own destiny from a standpoint of epitaxial wafer supply.

00:09:17 – Rodman & Renshaw are serving as the book runners with Cormark and IBK Capital as co-managers. The shares will be fully registered in both Canada and the United States. One of the primary reasons for doing this financial raise now, in a non-confidential basis, is so that we as a company can continue to operate from a position of strength from a balance sheet perspective as we have in the past.

00:09:52 – OK, on to the next slide, let me first introduce the concept of photonics. Photonics is the art of using light instead of electrons and electronics to communicate, manage, transfer, process data. In 2015 the United Nations actually declared the international year of light and all light-based technologies were included in the connotation of the international year of light and it emphasized the importance of light in all aspects of our technology today. Photonics has always been a superior technology to copper-based communications, but has historically been plagued with very high costs and esoteric manufacturing. As you will see on the slide, if you look at a typical current solution in photonics, it requires multiple components, each component manufactured independently, packaged independently, and all of these are then co-packaged together to form a total system solution.

00:11:01 – POET is about simplifying the packaging and complexity associated with photonics technology. The POET technology fundamentally alters the cost equation associated with an optical to electronic transition and then the electronic transition back to optics. We are all about lowering the cost and making photonics more affordable.

00:11:26 – So with that preamble we'll talk a little more about why, which markets, how and then what specifically is POET going to do to address this growing market and the growing need with regards to integration.

Slide 6

00:11:48 – On a company overview, POET is developing and transferring disruptive semiconductor process technology today. It is the industry's first monolithic integration of high-speed electronics and photonics, but monolithic will mean optical components and electronic components built together on the same chip, on the same wafer. There's no multiple devices, no multiple packages involved, it's a single chip integrated solution. The applications of our technology span multiple market verticals.

00:12:26 – We're currently transitioning this company from a technology development company to a company focussed on commercialisation. We have in the past, with you, talked about a lab to fab to commercialisation transition. We've spent the past year transferring the technology from the lab to fab, we're now heavily focussed on the commercialisation phase. The commercialisation phase includes scale up of the technology, make it more manufacturable, optimize the design, optimize the devices, get into product design, product development, cultivating customers, establishing sales channels, establishing distribution networks.

00:13:10 – There are two primary reasons for this raise actually, one of them of course is to increase our working capital to service an increasingly high demand for photonics solutions with our current customers, our current products in our current markets. We think that it's extremely important to grow our top line, to grow our revenue and then use that revenue growth to not only establish the sales channel and the customers, but also provide a source of cash into the

company to continue to fund R&D going forward. I mean, of course POET continue to use a significant chunk of the proceeds of this raise to invest in the development and commercialisation of our disruptive POET integrated optical platform.

00:14:02 – The POET disruptive technology and its sustained competitive position is underpinned with a very robust patent portfolio, and this is one of the reasons POET has been and continues to be one of the most valuable and actively traded stocks on the Toronto Venture Exchange.

Slide 7

00:14:23 – Go to the next slide. As part of our transition from a development company to commercialisation our recent acquisitions have really expanded our management team, and we have added leading industry experts in the area of semiconductors, photonics, lasers, as well as manufacturing and sales development. Combined, this team represents over 100 years of relevant industry knowledge and expertise that is all being brought to bare to commercialise our integrated POET optical technology.

00:15:00 – I myself joined POET in June of 2015 from GlobalFoundries where I spent six years leading the company's technology research and development activities. That included a ramp up into manufacturing of multiple advanced technology nodes. Prior to that, I had various leadership positions at Freescale Semiconductor and at Motorola, and I personally hold over 25 US patents in my name. What excited me, and continues to excite me, about this company is the disruptive potential of this technology. I have lived my life in the world of silicon where integration is king, functional integration, on chip, has been the engine that has driven the silicon industry for decades and now it's the time for us to apply those principles of integration functionally, monolithically to the world of optics and that's what I'm here to do, and that's what drives me to continue to work with POET to commercialise the technology that we've currently got on our plate.

Slide 8

00:16:13 – We have a seasoned Board of Directors, the board is now largely comprised of Silicon Valley veterans. Ajit Manocha continues to be our Chairman of the Board of Directors and executive of the company as well. He has most recently served as CEO of GlobalFoundries and also brings a wealth of experience from AT&T Bell Labs and Spansion. Dave Lazovsky who is in the room here with us is both the founder and CEO of Intermolecular and he drove that company from its early stage to a multi-million dollar valuation on the NASDAQ. Mohan Warrior is the former President and CEO of Alfalight which is a gallium arsenide-based high-power diode laser manufacturing company which he successfully sold in 2013. Our Board of Directors is active with the company, they form an advisory board for us and ensure that the vision of the company and the direction that the company is taking is sound and we're executing on all our cylinders.

00:17:32 – Go to the next slide, that presents our strategy on a page. We're poised to disrupt the market with integrated photonic solutions. We're the only company in the world, today, that can integrate monolithically – on the same chip, on the same wafer, in the same package – photonics and electronics. And this creates significant value through lower power, minimized size and component costs. We're also accelerating revenue and time to market through the acquisitions that we've done.

00:18:10 – We have made good progress in 2016 with our integrated VCSEL technology, especially as it relates to transferring the technology out of the fab and into a foundry, scaling the technology from small wafer sizes to large wafer sizes. We have, as we've discussed, had some issues that we're working through. Some are related to optimization of the technology and others related to events outside of our immediate control, and we will be providing an update on our progress as part of our third quarter earnings call in late November.

00:18:50 – It is really important to point out that our recent acquisitions have accelerated our ability to generate commercial revenue. Both with today's products in adjacent markets as well as the future POET products on POET's integrated platform.

00:19:08 – The acquisition of DenseLight, its customer base, its sales channels, its distribution network really helped shorten the cycle on the back end where we would otherwise organically would have had to develop all of those capabilities ourselves. And so while we've incurred some delays, as we've discussed in the front end, of the bring-up of the technology, we believe that we can substantially shorten the back-end cycle time associated with bringing the product to the market and getting revenue associated with these products.

00:19:45 – We continue to see high customer demand from large companies for opportunities that our technology can afford them. Data centers in particular is a target market for us, because we believe we can make a huge impact in them, in terms of reducing the total power consumption inside of data centers. POET solutions address directly some of the most excruciating things flowing from data centers in terms of power and energy management and I'll be discussing it later as well, as one of our engines that drive our future growth.

00:20:26 – As part of our acquisition of DenseLight we have also acquired a fully-equipped and fully-depreciated photonics manufacturing facility.

00:20:35 – We have got very high capital efficiency in this facility which means for small amounts of capital expenditure we can generate a large amount of revenue. The facility in Singapore is immediately capable, with modest investment, of delivering up to \$100 million of revenue which we can then scale up as we generate more demand and more growth with our technology. We are positioned for strong revenue growth, margin expansion and profitability. And our 58 and growing patents underpin a sustainable competitive differentiation that we bring to bear on the market.

00:21:22 – We are targeting a large and growing photonics market today. Photonics is an enabling technology involving the use of light, and it's replacing traditional electronics in many applications. Within the broad field of photonics we are focused on development and growth around two key verticals in the near term. It's photonic sensing and data communications. I'll discuss data communications on the next slide, but let me spend a little bit of time with you to explain the photonic sensing market.

00:21:59 – Photonic sensors are like electronic sensors that are used in moving technologies like MEMS today. The most prevalent example, perhaps, of a photonic sensor is a motion detector which uses infrared light to detect your presence for example. Photonic sensors are increasingly starting to be used in a variety of applications, including consumer applications. Cell phones and mobile devices for example, are talking about using optical sensors for such things as 3D cameras, proximity sensing, gesture recognition. They already include capability to do oxygen level monitoring, oximetry, heart rate monitoring, and in the near future people are now looking at non-invasive terms of blood glucose monitoring using photonic sensing elements.

00:22:59 – Automobiles are starting to use laser-based sensors for autonomous driving. Where you have to distinguish not just that there's an obstacle on the road, but is that obstacle a plastic bag, an animal or a human being. You can't do that with non-optics-based technologies and that's where lasers and visible communications come into play. When you go to an eye doctor, people look at your retina; retinal scans use photonic sensing elements. So I wanted to spend a little bit of time up front explaining to you the broad market of photonic sensing that we have an immediate presence in today as a consequence of our acquisition, that we intend to grow, because they are adjacent markets, and our photonic sensing is similar to a laser. The integration concepts that we've talked about are equally applicable in that market segment in addition to data communications.

Slide 11

00:24:03 – So going to the next slide on data communications. The first wave of photonics began in the early 2000's with the dotcom bubble, and at that time Internet companies were working on fundamental infrastructure that was driving photonics growth, mostly driven by undersea optical communications. We're now in the second wave of photonics growth and this one is different. This one is driven by consumers. It's driven by consumer behaviour, the need for more and more data, the need for creating, transmitting, storing the data. It's driven by what you and I do daily relative to video streaming, it's driven by increased resolutions in screens whether it be on phones or on TV's, social networking, the transition from small data centers to mega cloud infrastructure. All of these applications that are being driven by consumers on a day in, day out basis is driving the need for bigger data centers and is also driving the need for improved latency in these data centers as it relates to data communication. And so photonics

and optical communication engines are seeing a renewed growth spurt and the whole networking infrastructures now created a new and very dynamic segment in the optical components and modules market, and this is where POET is intending to bring to bear its proprietary technology as it relates to integrated photonics.

Slide 12

00:25:44 – So that's the why and why is it important to drive integration in photonics. Let's spend a little bit of time on how. The first proprietary platform for opto-electronic integration is a very novel semiconductor process technology and it is poised to fundamentally alter the landscape of optical data communications. We have transferred and are now developing and optimizing this proprietary platform that integrates electrical and optical communications elements on the same chip.

00:26:17 – Integrated photonics, as we call it, can augment the capabilities of existing silicon technology. It enables functional integration in photonics and drives functional scaling of solutions even in the absence of traditional Moore's law scaling. So we are part of what is called the "More than Moore" class of technologies where we augment existing silicon technologies with new capabilities to drive new applications.

00:26:49 – Optical connections of course are much faster and more efficient than copper, and that's one of the reasons why we want to lower the barrier to adoption of optical technologies by lowering the costs, and enabling higher and larger wafer scale manufacturing, and that's what POET's proprietary platform is all about.

Slide 13

00:27:11 – The platform itself is protected by 58 patents and growing. A majority of these patents are structural patents which are in fact the most valuable kind, because it protects the fundamental structure of how the devices and components are in fact manufactured. This provides a high barrier to entry and we will continue to drive additional research and development to expand this IP portfolio to build the walls around our technology which is important for the future of POET as a company.

Slide 14

00:27:51 – On the next slide I want to talk a little bit about how does one create value with integration and why does photonic integration in itself create value. Let me spend a little bit of time on an analogy. In the past, we used to have stand-alone GPS navigation devices that we would use. Today those devices are integrated into your cell phone. And, well, that has disrupted the stand-alone navigation device market and created more value to the manufacturers of the cell phones. The same can be said for the digital cameras where today you don't go buy a stand-alone digital camera, unless you're a professional, but rather you would use the camera on the cell phone that have become more and more powerful and are

capable of doing what every customer wants to do. That's another example of a market getting disrupted as a consequence of integration.

00:28:46 – Similarly, POET intends to integrate multiple discrete components into a single chip. By virtue of being an integrator, we assimilate the value, we disrupt the market. These integrated solutions over time become the de-facto standard and the pre-eminent solution, and allow us to enjoy a first mover advantage with a robust patent portfolio protecting our investment.

00:29:18 – So when you integrate, you move up the value chain. As you move up the value chain, you can extract and maintain more value in the products and in the company. And that's really what's motivating our desire to drive the whole concept of photonic integration into the market segment.

Slide 15

00:29:42 – Specifically on the what are we going to do: The next slide talks about the integrated optical engine that POET brought in it's place. Conventional solutions typically use four to five chips packaged together to transmit optical signals. Electrical signals come in, they are converted into optical signals, which are then transmitted out and then converted back into electrical signals. Lasers are the components that create the light, the detectors are the components that receive the light, and decode that light back into an electrical signal. In addition we need amplifiers and other control circuitry that control the lasers and control the detectors. That ecosystem of products then has to be put together, assembled, aligned, and packaged together in a fairly complex and expensive manner.

00:30:45 – What POET intends to do is to effectively displace these four or five different chips that are packaged together today and integrate those functions into a single die. And so what we are talking about doing, is having a single-chip transceiver, a single chip that can create the light, transmit the light, receive the light, decode it and convert it back into an electrical signal, all integrated in one chip, monolithically, on a single wafer.

00:31:19 – The advantages of course: lower cost, economies of scale, lower power, fewer components. The fewer components you have to assemble in a package, the higher the reliability. That is very important to them as market segments that we are trying to go after. Small form factor is critically important. If you got a bulky component or a bulky product, it's hard to fit these bulky components or products in slim form factor devices or applications where space is a premium and so a small form factor is critically important to get into applications that today don't exist, or create new markets that today don't exist.

00:32:03 – Ultimately what we are doing is creating an innovation platform for our customers to come on to and innovate new products that we haven't even thought is possible today. And so we fundamentally alter the optical market with a single-chip solution that dramatically improves a wide range of characteristics. This is why I joined the company. This is the disruption that we

believe we can bring to bear and this is the disruption that will ultimately provide us with a sustained competitive differentiation in the market.

Slide 16

00:32:37 – I want to spend a little bit of time talking to you about data communications in general, but before I do that let me give you some background associated with the breakup of these data communication links, if you will.

00:32:53 – There are links that are categorized as long reach, medium reach, short reach, and very short reach. As you go from long reach to very short reach the volume goes up and you get closer and closer to the silicon chip. Optical technology has basically replaced copper, starting from the left to the right on this chart. So all the way through the very short reach applications where we talk about rack-to-rack, less than a 100 meter kind of length, have already been converted to optical technology.

00:33:30 – What POET intends to do is to convert the rest of this chain to optical technology by bringing new differentiated, lower cost, lower form factor solutions. But rather than starting there and working into future applications we felt it was important for POET as a company to also participate in a large and existing market with regards to optical communications and we felt that it was important for us as a company to not only work on the high volume short reach applications that are growing markets in the future, but to use our integration concept and to use our integration IP and make a difference to the existing large and growing markets that are associated with the long and medium reach communication segments.

Slide 17

00:34:25 – And to that end, earlier this year, we made two acquisitions. These acquisitions serve to expand our capabilities, they serve to expand the markets that we can serve. The total available market that is open to us is increased, the addressable market is increased as well.

Slide 18

00:34:49 – What you see on the slide now is an example of just how much we've increased our addressable market in data communications. The sliver in green is where gallium arsenide technology plays in. It's primarily a short reach communication link model which POET will expand to the very short reach communications through its integrated capability. But, in and by itself, gallium arsenide technology would not have had access to the red and blue sections of the pie you are seeing in the chart right now. Those are typically covered using indium phosphide base, medium wavelength, and long wavelength technologies. And so by incorporating DenseLight and BB Photonics into POET we have dramatically increased the share of addressable market in fundamentally the same business. We're making lasers to create data communication links. Just because it's indium phosphide doesn't mean that it's a completely new product or a new market. It's a new material system, but it expands our

capability in a seamless manner and allows us to use our concepts and IP associated with integration in a much larger market segment.

Slide 19

00:36:17 – Another consequence of our acquisition is an immediate access to a strong and growing customer base. We've got multiple customers in multiple market segments today, we service some big names, we service Molex in data communications. Necsel: Necsel is one of the largest suppliers of laser-based projection equipment in the world today, we service JDSU, we service Honeywell. And these are customers that can use our existing products, but can also scale their own business utilizing our future products with a POET integrated opto-electronic solution. So they are just not our current customers today for our current products, they represent an entry into a market, an entry into customers that will be future customers for the POET technology platform.

00:37:14 – We provide significant value in a variety of applications and can address additional simplification in terms of photonic sensing utilizing the POET intellectual property. This is evidence of what I mentioned earlier in terms of accelerating our time to market, accelerating our time to revenue and accelerating our commercialization timeline. We continue to work closely with these and other targeted customers to further expand our customer base for existing and future products.

Slide 20

00:37:50 – I want to talk to you now about the opportunity and our go to market strategy.

Slide 21

00:37:56 – If you go to the next slide you can see that data communications is a large and growing market. But there is another interesting trend in data communications, and it's a trend towards integrated solutions. POET's integrated solution is integration on steroids. We don't just integrate a couple of functions and call it integration. We don't integrate a couple of chips inside of the same package, we integrate electronics, and optics, and all the chips monolithically in the chip. And so we're poised to bring our technology to bear in the data center market about the time that the inflection point in the industry is towards adopting more integrated solutions.

00:38:46 – Data centers primarily care about moving data from point A to point B at the lowest cost point possible. Data center providers don't want to hear about new technologies unless they bring a cost differentiation into play. POET by definition brings cost differentiation into play. POET by definition eliminates the need for multiple chips. POET by definition drives lower power consumption. So we are poised with our integrated solution to meet the size, weight, power, performance, and cost requirements for next generation data communication.

00:39:31 – From our original entry into the data communications market we have a variety of adjacent segments in which our applications are immediately usable, be it consumer solutions where next generation USB standards, next generation HDMI standards are moving to optical standards, 4K, 8K, High Definition TV's need to transmit tremendous amounts of data and they're doing it using electronic communications today where low-cost optical communications can be a huge advantage. Automobiles, as I mentioned, going to autonomous driving vehicles are having to take in a lot of video data, process it in real time and with very little latency make control decisions on what the car is going to do. And so there are new optical standards being developed for automotive where communications can transition from copper to using optical fiber and optical communication links. Laser-based distance and ranging, or LIDAR, applications in automotive are also growing at a tremendous rate. We've talked about mobility, we've talked about how mobile devices are using VCSELs for 3D gesturing or 3D cameras. We've talked about photonic sensing applications as well, and healthcare. These are all adjacent market segments that we categorize as future opportunities, but once our solution is validated in an application in a data center, these are very accessible markets for POET to disrupt as well.

Slide 23

00:41:17 – So let's now go through our addressable markets today. We are focused, as we mentioned, on photonic sensing and data communication. In the near term, our product revenues will be largely driven by photonic sensing. That is where we're seeing demand, we're investing, and we're growing the customer base, and growing our revenue. We will build that revenue up with discrete and integrated lasing solutions in 2017 and thereafter we would be migrating towards the longer reach transceivers and the active optical cables, in that order.

Slide 24

00:42:00 – So let's spend a little bit of time on photonic sensing.

Slide 25

00:42:04 – We have products in the market today, we've got the most broad portfolio of photonic sensing high-powered LEDs today, and we're servicing that market across a variety of verticals, test and measurement being the largest of them, but guidance and navigation is becoming very important with regards to autonomous vehicles, drones. We've got some of our chips in space, sold to customers that have used our chips to create fiber optic gyroscopes. We sell into the structural health business, we sell into oil and gas industry, and medical and healthcare. We have a plan to expand our roadmap in this space over the next year to include short wavelength high-powered LEDs where some of the POET technology and POET IP will be brought to bear and we're also expanding the reach of our broadband light sources so that spectroscopy and other applications can be more readily available at lower cost to more customers and more consumers.

00:43:18 – Discrete lasers and integrated lasing solutions. It is a big market today driven by fiber to home. Fiber to home is big in Asia today and is expected to be big in terms of growth in Europe and the United States as well. And data centers of course, as we've talked, about are growing at a tremendous push.

Slide 27

00:43:42 – Both of those market segments are driving the need for indium phosphide-based lasing and receiving solutions. A big chunk of that market is discrete, that we participate in today, and we would expect to disrupt that market by bringing some of our IP, from an integration standpoint, into that market.

00:44:04 – One of the points I want to note, in this particular slide on the right, you will see that discrete solutions make up a majority of the sales in terms of unit volume. However, if you look at the market size in terms of revenue, you will see that the integrated solutions drive most of the revenue. And this is an example of how you can aggregate value with integration. The more you can integrate solutions, the more value you can drive, the higher ASPs (average selling price) are for that particular part. So our goal is to layer the revenue stream from photonic sensing with discrete and integrated indium phosphide lasing and receiving solutions as the next layer, if you will, of our revenue and our product portfolio.

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00:44:58 – And following behind our discrete and integrated lasing solution are solutions utilizing our POET integrated opto-electronic technology. We've talked about the technology currently being in the development phase and being readied for commercialisation in 2018 with the first market being active optical cables. The market is continuously seeking to replace traditional copper-based links with optical interconnects at increasingly shorter transmission distances. The challenge has been cost and that's what POET is going to drive to address with its integrated optical engine. We believe we can lower the power consumption dramatically over copper cables, it can be a smaller size, form factor and cost competitive with copper solutions, and it brings to bear some of the other advantages of optical cables such as weight, size, the ability to increase face blade density on servers, electromagnetic interference in links, etc. That is our path to driving revenue in the active optical cable segment, starting in 2018.

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00:46:20 – And finally from there, the POET technology provides the path to what I would call the holy grail of optical communication, which is communicating optically out of the chip and communicating chip-to-chip using optical communication. POET, as a consequence of its

integration capability, as a consequence of its size and form factor, can start driving optical communication closer to the chip, first inside the box, and then on the board, and then finally onto the chip itself where we can make ourselves, from a solution standpoint, to an ASIC or a server chip and enable that chip to communicate optically, dramatically increasing bandwidth, and dramatically reducing power consumption. Again, it's all about creating and capturing value through integration.

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00:47:17 – Our financial overview. Let's talk about monetization of this technology. We've got multiple potential sources of revenue that we are working on. Of course immediately today we've got revenue from product sales. And product sales will continue to be a good source of revenue and a primary source of revenue for us in the coming years. That is, through sales of products using photonic sensing, through sales of products for lasing as well as transceiver chip sets for data communications and consumer applications.

00:47:56 – We are working with customers and partnerships that can drive NRE revenue into the company over the next year(s). NRE revenue can take multiple forms. It can come in the form of offsets, it can come in the form of custom development programs, and it can come in the form of technology transfer licensing agreements. And we are working on all three of those today.

00:48:23 – In the future, there are additional possible sources of revenue for the company in terms of foundry licensing or product licensing in spaces that POET does not intend to participate in. Potentially enabling second source licensing for very high volume applications. And finally chip set royalties.

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00:48:44 – So building through our product-based revenue, this slide talks about the forecasted growth of our served markets. POET is moving into a combined market opportunity of up to \$3 billion dollars in its initial targeted market of photonic sensing and data communications. These are very specific markets where we've got a specific product roadmap and specific product applications that we will be targeting in this time frame. As we've discussed before, our immediate sales will be with photonic sensing and discrete lasers and will be followed shortly with our foray in long-reach communications and Active Optical Cables utilising the POET integrated opto-electronic technology.

00:49:41 – We are not layering on the slide all addressable markets, but as we have discussed, an immediate entry into data communications provides an adjacency into market segments that are equally large and are equally accessible, but are not captured on the slide in terms of our existing SAM that we're forecasting to the market.

00:50:06 – If you just looked at the slide and assumed a conservative price percent penetration rate, in 2021 the revenue stream is already more of \$125 million and that gives you a sense of the upside potential that exists with this company relative to its technology and its solution.

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00:50:39 – So finally I'd like to summarize with the following points. We have established product sales today in large and high-growth photonic market segments with our recent acquisitions. The revenue is expected to exceed \$2 million in the second half of 2016, driven primarily by sales of sensing products. We expect 2017 revenue to grow year on year, again driven by component sales in both photonic sensing and lasing. Our DenseLight business unit is expected to reach positive operating cash flow in the first half of 2017.

00:51:24 – The POET technology is poised to disrupt multiple adjacent markets. We are engaged with and anticipate high customer demand for our integrated photonic solutions. New solutions relieve current cost and power pain points in data communications in a way that only POET can address. This allows us to create and capture significant value through photonic integration, we walk our way up the value chain. The more components we integrate, the more value we keep, the more value we capture. We've got a very high capital efficiency model with a fully-equipped photonics manufacturing facility and we've got a source of sustained competitive differentiation with a broad portfolio of patents that protect us and provide a barrier to entry. In short, we're positioned for strong revenue growth, market expansion and profitability. And with that I'd like to conclude and I thank you all for your kind attention. Thank you.

00:52:35 – Operator: Okay, ladies and gentlemen, this concludes the call and you may now disconnect.

00:52:51 – Someone in the background: We ended really abruptly.

00:53:10 – He did right up until the end. Then he said by 2021, if we capture 3 % of the market that would be \$125 million in revenue. Our market cap is over \$250 million, so that means, he thinks the shares by 2021, the market cap will probably be billions.