# NANOSTRUCK ANNOUNCES 85% RECOVERY RATES FOR 0.68 GMS/TON PALLADIUM TAILINGS

### Highlights:

- 84.8% Palladium recovery rate from Samples Grading 0.68 Parts Per Million (PPM)
- Patented Process with Global Application
- Cyanide Free, Environmentally Friendly Process

**October 21, 2014 - VANCOUVER,** Canada – NanoStruck Technologies Inc. (the "Company" or "NanoStruck") (CSE: NSK) (OTCQX: NSKTF) (Frankfurt: 8NSK) is pleased to announce recent results of test work carried out on palladium mine tailings, utilizing a proprietary recovery technology that recovered in the order of 84.8% of palladium, from samples grading 0.68 parts per million (ppm), or 0.68 grams per metric ton.

Bundeep Singh Rangar, Interim CEO and Chairman of the Board said: "The sheer size of palladium tailings around the world is immense and these results confirm the applicability of this technology. With these high recovery rates utilizing a patented process, we will look at further development providing the platform for a global application to the marketplace."

In the tests, the tailings were ground to 75% passing 200 mesh (-74 micron) and treated with a four-hour proprietary acid leach at 70 degrees Celsius yielding recoveries of 84.8%. Altering the grind size, leach kinetics and temperature to 100% passing 325 mesh (-44 micron), eight hours and 90 degrees Celsius, yielded recoveries of 86.4%.

The proprietary process combines a novel mixed acid leach with a solvent extraction stage utilizing specific organic compounds. No cyanide was used in the environmentally friendly process. The flow sheet design is for a closed loop, sealed unit, in which all chemicals are recycled.

#### Target Market Defined:

Russia is the largest producer of palladium followed by South Africa, with 38% of world mine production, according to the Commodity Research Bureau, a leading commodities research and analysis firm. The two countries concentrate more than 80% of the world's palladium. South Africa exported US\$860 million worth of palladium in 2012. The same year, approximately 8.7 million ounces of palladium were supplied to the market (valued at US\$6.9 billion), of which approximately 6.3 million ounces (valued at US\$5 billion) came from primary mining and 2.4 million ounces (valued at US\$1.9 billion) from secondary tailings recovery. Zimbabwe has the world's largest platinum and palladium reserves, after South Africa. Zimbabwe's palladium output has increased by 17% in 2013 to 310,000 ounces per year, according to Bloomberg and represents 5% of the world's total output.

The technical information contained in this news release has been verified and approved by Ernie Burga, a qualified person, for the purpose of National Instrument 43-101, Standards of Disclosure for Mineral Projects, of the Canadian securities administrators.

#### About the Company

NanoStruck Technologies Inc. is a Canadian Company with a suite of technologies that remove molecular sized particles using patented, absorptive, organic polymers. These versatile biomaterials are derived from crustacean shells or plant fibers, depending on the requirements of their usage. Acting as molecular sponges, the nanometer-sized polymers are custom programmed to absorb specific particles for remediation or retrieval purposes. These can be used to clean out acids, hydrocarbons, pathogens, oils and toxins in water via the NanoPure solutions and to recover precious metal particles in mine tailings, such as gold, silver, platinum, palladium and rhodium, using the Company's NanoMet solutions.

By using patented modifications with conventional technologies and adding polymer-based nano-filtration, the Company offers environmentally safe NanoPure solutions for water purification. The Company uses Environmental Protection Agency (EPA) and World Health Organization (WHO) guidelines as a benchmark for water quality and safety, to conform to acceptable agricultural or drinking water standards in jurisdictions where the technology is used.

Additionally, the Company's technology can be used to recover precious and base metals from mine tailings, which are the residual materials from earlier mining activities. By retrieving valuable metals from old tailing dumps, the Company's NanoMet solutions boost the value of existing mining assets and reduce the need for new, costly and potentially environmentally harmful exploration and mining.

The Company's current business model is based on either selling water remediation plants or leasing out units and charging customers on a price per liter basis, with a negotiated minimum payment per annum. For processing mine tailings, the value of precious metals recovered is shared with tailing site owners, on a pre-agreed basis.

## For further information contact:

Nelson Hudes, Public Relations

- T: +1 905 660 9155
- E: <u>Nelson.Hudes@NanoStruck.com</u>

Raj Kurichh, Chief Marketing Officer

- T: +1 905 813 0900
- E: Raj.Kurichh@NanoStruck.com
- W: <u>www.NanoStruck.com</u>

#### NEITHER THE CANADIAN SECURITIES EXCHANGE NOR ITS REGULATORY SERVICE PROVIDER HAS REVIEWED AND DOES NOT ACCEPT RESPONSIBILITY FOR THE ADEQUACY OR ACCURACY OF THE CONTENT OF THIS NEWS RELEASE.

This press release contains forward-looking statements. The use of any of the words "anticipate", "continue", "estimate", "expect", "may", "will", "project", "should", "believe" and similar expressions are intended to identify forward-looking statements. Statements relating to "reserves" or "resources" are deemed to be forward-looking statements because they involve the implied assessment, based on certain estimates and assumptions that the resources and reserves described can be profitably produced in the future.

Although the Company believes that the expectations and assumptions on which the forward-looking statements are based are reasonable, undue reliance should not be placed on the forward-looking statements because the Company can give no assurance that they will prove to be correct. Since forward-looking statements address future events and conditions, by their very nature they involve inherent risks and uncertainties. These statements speak only as of the date of this press release. Actual results could differ materially from those currently anticipated due to a number of factors and risks including various risk factors discussed in the Company's Management's Discussion and Analysis for the three and six months ended June 30, 2014, filed on August 29, 2014, and for the year ended September 30, 2013, filed on January 28, 2014, under the Company's profile on www.sedar.com.

THE FORWARD-LOOKING INFORMATION CONTAINED IN THIS NEWS RELEASE REPRESENTS THE EXPECTATIONS OF THE COMPANY AS OF THE DATE OF THIS NEWS RELEASE AND, ACCORDINGLY, IS SUBJECT TO CHANGE AFTER SUCH DATE. READERS SHOULD NOT PLACE UNDUE IMPORTANCE ON FORWARD-LOOKING INFORMATION AND SHOULD NOT RELY UPON THIS INFORMATION AS OF ANY OTHER DATE. WHILE THE COMPANY MAY ELECT TO, IT DOES NOT UNDERTAKE TO UPDATE THIS INFORMATION AT ANY PARTICULAR TIME.