

Teleconference Meeting Minutes

To: Mitjan Kalin (Coordinator)

From: Muhammad Shahid Arshad

Date: 28 Jan 2019

Time: 10:00 a.m. to 11:15 a.m.

Venue: internet

Subject: 3 months Teleconference meeting Vr4

10.00-10:15	<p style="text-align: center;">Opening</p> <ul style="list-style-type: none"> - Setup of skype and Introduction
10:15-11:00	<p>NTNU</p> <ul style="list-style-type: none"> - They have received new W-DLC coated sensors from IPN deposited with DC sputtering method and they will start working on tribocorrosion with glycerol+ionic liquid. - They have found a way to make QCM measurements with their instrument to get precise information about the adsorbed mass without additional hardware. They are having issues with glycerol viscosity at room temperature, increasing temperature to 60-70C may help. - Turbidimetry on glycerol+ionic liquids was done. Solution with IM, PP and AM are stable upto 15 days however BMP become unstable after 3 days. Results are consistent with TINT findings <p>IPN</p> <ul style="list-style-type: none"> - They have produced W-DLC coatings with DC sputtering method for TINT and NTNU - They have started the optimization of new coatings AgDLC with DC sputtering. For TINT thickness of the coatings will be around 3 um and Ag

	<p>content around 10%. However, for NTNU thickness will vary from 200 nm to 3 um with similar Ag content.</p> <ul style="list-style-type: none"> - Albano asked consortium members to send new discs/sensors/samples for coating within 15 days - Further, they showed a presentation based on characterization of WDLC, these samples were used in previous tribological studies (prepared with conventional PVD). Presentation was based on SEM (thickness analysis, interlayer...), TEM, and EELS. Results looks very promising <p>TINT</p> <ul style="list-style-type: none"> - We are working on XPS and FTIR measurements to study further tribochemistry of the surfaces and functional groups in ionic liquids. We have started writing article on this. Article will include preparation of WDLC coatings, their characterizations, tribotests and their characterizations (friction, wear, SEM+EDS), Tribochemistry..... - Some of the tests were repeated - IPN will send a report on WDLC with information about SEM+EDS, AFM (roughness), hardness, TEM (if possible), <p style="text-align: center;">WP9 & WP10: Management and Dissemination Summary of agreed Actions</p>
<p>11:00-11:15</p>	<ul style="list-style-type: none"> - D9.7-midterm report (4th JPM) 18 months. Each consortium members will prepare the reports based on a template and TINT will combine them together and submit to EU - Consortium have decided to meet at ECOTRIB 2019 conference in Vienna on 11 June. Prof. Mitjan will make necessary arrangements with ECOTRIB management. - NTNU will send IAB commitment from Oilwell Verco to IPN - IPN will update midterm press release and news on website. IPN have prepared template for the deliverables (its available on greencoat website).