**2017-2018 IFPRI Projects**

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| **Type** | **Research Area** | **Project Title** | **Research Associate** | **Institution** |
| **Full Project** | Characterization | [Die Filling of Aerated Powders](http://www.ifpri.net/Academics/Reports/1314AnnReports/ARR-2014-05-wu.pdf)  | C. Wu | U. Surrey |
| Size Reduction | [Development of Grindability tests](http://www.ifpri.net/Academics/Reports/1314annreports/arr-2014-06-ooi.pdf)  | J. Ooi | U. Edinburgh |
| Formation | Molecular Self Assembly | U. Wiesner | Cornell U. |
| Crystal Shape Prediction | M. Doherty | UCSB |
| Creating Tuneable Agglomerates via 3D Printing | K. Hapgood | Monash U. |
| [Relating Compaction Performance and Behavior to Process Conditions](http://www.ifpri.net/Academics/Reports/1314AnnReports/ARR-2014-02-Zavaliangos.pdf)  | A. Zavaliangos | Drexel U. |
| Spray Drying at High Temperatures | A. Bayly | U. Leeds |
| Dry Systems | Flowability Assessment of Weakly Consolidated Powders | C. Hare | U. Surrey |
| Prediction of Segregation | J. McCarthy | U. Pittsburgh |
| Dry Powder Rheology | K. Daniels | NC State U.  |
| Scaling Rules for Powder Mixing | I. Govender | U. KwaZulu-Zulu |
| Wet Systems | [On the Long-Term Stability of Colloidal Gels](http://http/www.ifpri.net/Academics/Reports/1314AnnReports/ARR-2014-03-Poon.pdf)  | W. Poon | U. Edinburgh |
| Deliquoring of Sovent Wetted Cakes | U. Peuker | TU Freiberg |
| Systems Engineering | Model-Based Control of Crystallization | Z. Nagy | Purdue U. |
| **Collabora-tions** | Dry Systems | Non-Local Rheology of Intermediate Granular Flows | Daniels and Vriend |  |
| Dry Systems | Experimental Validation of Segregation | McCarthy and Hill |  |
| **Reviews** | Wet Systems | Methods (Experimental and Numerical) for Describing Wall Boundary Layers in High Shear Systems (Extruders) | R. Bonnecaze | U. Texas |
| GrindingCharacterization | Use of Grinding Aids in Dry Systems Relative Humidity and the Flowability of Hydroscopic Powders and Granules | A. Kwade | TU Braunschweig |
| **Work- shop** | Wet Systems | Suspension Slurries – Insights from New Physics | June 22 and 23, 2018 | U. Edinburgh |
| **Round-table** | Dry Systems | Round Robin Exercise on Calibration of DEM Simulations | TBD | TBD |
| **Project Briefs for 2018 Programs (Proposed Programs)** | Formation | Effect of Material Properties on the Adherence of Powders to Metal Processing Equipment During Compaction | TBD | TBD |
| Formation | Characterization of Spray Drying Nozzles at Industrial Relevant Conditions | TBD | TBD |
| Dry Systems | Flow at Boundaries – Spreading in Thin and Uniform Layers | TBD | TBD |
| Wet Systems | Investigation of Particle Characteristics on High Solids Rheology | TBD | TBD |
| Wet Systems | Wetting, Dispersion, Distribution of Powders and Packed Beds: Reconstitution of Organic/Biological Materials | TBD | TBD |
| Grinding | Predicting and Characterizing of Surface Modifications During Milling | TBD | TBD |