



Sustainable Development since 1985

PP Polymer AB is an independent consulting, research and development company working with the chemistry of polymeric materials and surface coatings. It was established 1985 by Dr Swaraj Paul, the author and co-author of "Surface Coatings: Science & Technology" editions 1 and 2 by John Wiley & Sons 1985 and 1996 and "Comprehensive Polymer Science: Vol 6" by Pergamon press 1989.

We have always worked for sustainable development. We have increased the productivity at our customers site by taking care of the chemical possibilities. At the same time we have been very keen to take care of mankind and environment through eliminating use of hazardous chemicals.

For example we helped Bahco Tools to solve an adhesive problem for electronic pliers. A thermo elastic material covers the steel arms of the pliers in order to obtain good grip and insulating properties. These materials are, in general, very difficult to glue. Furthermore, the adhesive should not be health hazardous. After one year of developmental work we succeeded in solving the problem and we now deliver the adhesive directly to Bahco Tools.

Scientific Credentials

PP Polymer owns extensive know-how in the fields of: Surface Coatings, Adhesives, Polymer Materials and Insulation Materials including Insulation Lacquers. We are also working with indoor air analysis and work with building related problems. We are situated in Stockholm, Sweden. Our business area comprises of product development in liaison with industries in our field of expertise. We also help manufacturing industries in solving their trouble-shooting problems on a very short notice.

As scientific contribution we have for instance developed together with the Swedish Rescue Services Agency a halogen free flame retardant additive for polyolefinic materials e.g. polyethylene (PE) and polypropylene (PP). Our additives are used at relatively low loadings that do not influence the processing or the properties of the plastic materials. The product is now available on commercially quantities.

Environment and Health

The environment and the health of the human being is very important for us. All polymeric materials has a certain influence on environment and mankind, we try to focus our problem solving or analysis activities in a way that makes the outcome positive for the both. Examples of such efforts are analysis of aldehydes and prohibited brominated flame retardants such as PBB, PBDE and TBBPA that we have developed lately. In general, all our products and the solutions that we present are non hazardous or / and environmentally friendly. In our laboratory, we also perform analysis to secure indoor air quality.

Technology Edge

When you visit us you will soon realise that our well-equipped laboratory is the heart and the strength of our company. Since 1985 we have built our lab strategically to fulfil these aspects. For our evaluations we extensively use thermal analysis such as DSC, TGA, DMA, TMA and also other analytical tools such as FTIR, GPC, HPLC, Pyrolysis/GC/MS, Dynamical headspace/GC/MS, TD/GC/MS etc. We perform our own polymerisation if required and prepare our own polymer blends on a lab blender to develop hot-melt adhesives and tailor-make polymer compounds.

Technology Implementation

Our newest acquisition is a SEM/EDS that makes it possible to study surfaces under very high magnification and thereby can be used to investigate surface defects, morphological differences and surface failures. We also get answers on adhesion, surface contaminations problems and also can determine composition of multi-layered laminates. We also perform particle analysis of dust and asbestos analysis by using our SEM/EDS technique. What makes us so special contrary to other organizations is that we have stored all information from all the analysis and the trouble shooting problems from different application areas in the industry during our last 20 years of business in a reference library. No matter, if it relates to material analysis or analysis for the indoor air climate or out gassing from the materials.

Unique Products

We tailor-make products according to our customers needs. In 1997, our 100% owned daughter company, Paul Polymer Production was found and it produces only the niche products that we have developed for our customers.

To name a few we produce the unique products for Kodak, Alstom and ABB. For Kodak we have developed cement for splicing cine films. Compared to the older product our new cement does not contain any health hazardous chemicals. For ABB and Alstom also we developed a non-hazardous insulation lacquer for the hydral power generation that is used all over the world today.

A Reliable Partner

Quality assurance within the organization is a key element as it is important towards our customers. We are an Investor in People (IIP) certified company since 2000, that means our co-workers qualifications are matched and updated to the highest level to achieve the company goals. We have an Environmental certification since 2003 equivalent to ISO 14001 for SME and we are also rated AAA since 1997 by Dun & Bradstreet. All these certificates indicate that you as a customer can trust us. A secrecy agreement is always an obvious thing when we work on assignment.

We are now expanding our R&D activities and are establishing a partnership in India. We have just concluded a collaboration agreement with an Indian business group and will start building a R&D lab in our field of knowledge.

