

### Comment from the Communications Desk

The purpose of this broadsheet is the sharing of stories, information and opinion on the use and adaptation of research results. It replaces the old "No Name" newsletter on utilization. We often learn as much from our failures, as we do from projects that, in our view, have succeeded. It takes courage, but let's hear about both kinds of experiences.

This broadsheet should not hide from controversy or argument. The issues of utilization are important enough to spark debate. It is not so important to be "right" here, as it is to be insightful and thoughtful on what IDRC means when it says it wishes to undertake the things that "work".

PRAXIS will have a fairly liberal editorial policy to make way for a broad range of styles and examples. We look forward to hearing from you with your stories and with any suggestions on how this broadsheet can be improved.

David Nostbakken, Ph.D.  
Director of Communications

### Editor's Note

PRAXIS - the word has a Greek origin, meaning *action*, or *putting theory into practice*. As such it seemed appropriate for this newsletter.

This is the first, and "experimental" issue. We welcome your comments on this format and any of the articles contained herein. An effort will be made in each issue, to vary the geographical coverage and issues addressed. Should you require further information, or wish to follow up a story, you can contact me or the respective authors or officers mentioned in the articles.

Arun Abraham, Editor

### Corporate R & D Profile --- A Washing Machine for Sarees - US Manufacturer Sets Strategy for the World Washer\*

With retained earnings and returns on shareholders' equity on a downward slide, the US multinational appliance manufacturer, *Whirlpool Corp.*, is placing high hopes on a strategy for the developing country markets.

The Whirlpool marketing strategy is one that is geared towards the burgeoning middle class in such newly industrializing countries as Brazil, Mexico and India. They are betting that young professional couples will forego the traditional forms of laundering, such as use of the *dhobi* in India or even the local riverbank, for Western-style automatic washing machines. Last year a joint venture project in India began producing compact washers with specially designed "agitators" that will not tangle sarees, the long, flowing outfits worn by many Indian women. Variations of this machine, the *World Washer*, are also being built and sold in Brazil and Mexico. Ultimately, exports of the washer to other Asian and Latin American countries will be generated from factories in these three countries.

The *World Washer* has about half the capacity of US models, and will do 11 pounds of wash per load. Clearly these three countries represent the biggest growth potential for washers and other appliances. The washer is designed to be simple and affordable (between USD 270 and 650). When the market is ready to take off, Whirlpool expects to have its sales networks ready. The competition will be stiff, especially with Asian-based companies such as Toshiba and Hitachi already in the lead in the compact appliance market.

\* Adapted from *Newsweek* 3 June 1991.



### PINE TANNINS: THE ART OF MAKING A DEAL--Program Officer Helps Negotiate USD 500,000 Contract by Arun Abraham

My eyes were stinging in the swirl of smoke that permeates the Broadway Deli on Albert Street. Across the table Salama Fahmy, Senior Regional Program Officer from the Communications Division, was explaining how a rust-inhibiting technology developed through IDRC support, had reached the early stages of commercial application - the drafting of a technology transfer agreement that would bring, at a minimum, USD 500,000 to the Chilean researcher and Universidad de Concepcion in Chile.

"If I was to give advice to Program Officers" he said, pausing to draw on a *Coronado* (Latino brand of cigarette), "there would be three things. First, get a local lawyer with expertise in patents and licensing negotiations. Second, know the market potential and saleability of the final product. How else to judge minimum guarantees and percentage of the royalties? And third, try to assess if the researchers or beneficiaries have sufficient business experience - otherwise they tend to get anxious during the final negotiations and are likely to give in on certain terms of the contract that may be to their detriment." Experienced corporate negotiators often use tactics that "wear down" their counterparts across the table.

Program Officers may find themselves in two distinct situations, according to Rob Robertson, IDRC's General Counsel. First, assisting the recipient to negotiate, and second, to negotiate on behalf of IDRC. Fahmy's advice is sound in this situation, but if IDRC is negotiating as the owner of a technology, the Office of the Secretary and General Counsel (OSGC) has responsibility for hiring lawyers.

The project, *Pine Tannins as Anticorrosives*, originated as an Earth and Engineering Sciences (EES) initiative. It combined the technical expertise of Dr. Walter Smeltzer from McMaster University in Hamilton, with researchers from the Faculty of Engineering at the Universidad de Concepcion. Guillermo Matamala, the project leader has diversified the uses of *tannins* extracted from the bark of pine trees. This bark is normally left as waste by the large Chilean sawmill industry. A *tannin* is a tar-like substance that is traditionally used for tanning, dyeing, making of ink and some medicines.

Matamala has developed a solution using the tannins, that has three new applications. The first is to prevent corrosion of boilers or steam process equipment. The second is an additive to lubricating oils that coat freshly produced or bare steel (this can double the shelf life of steel). And the third, the one currently being exploited, is a paint primer which converts rust into a smooth, sealed surface.

### GEMINI AWARD WINNERS ANNOUNCED --- Program to be Revamped in Future

The winners of the 1991 Award for Young Canadian Journalists, or Gemini Award were announced recently. Alexander Norris, a reporter with the *Montréal Gazette*, and Mark Richardson, currently with the *Ottawa Citizen*, will each receive CAD 25,000 to carry out their respective programs. Norris will examine the struggle for native land rights and their relationship to the environment in Brazil, while Richardson will be looking at the link between politics, poverty and deforestation in several African nations.

The program involves, over the course of one year, an internship at Gemini News Service in London, England, combined with field work in a developing country. The purpose of the award is to strengthen the capacity of young journalists to report on Third World issues in a more informed way, and to sensitize the Canadian public about these issues. It is hoped that the experience

It was with some difficulty that Matamala was able to find clients interested in buying his technology. He was unable to find Chilean parties interested in licensing the technology. Fortunately, through the channels of the IDRC *Chemical Technology Network*, Matamala found a Brazilian paint company called IBRASOL, willing to make a deal.

The deal has two essential components - provisions for licensing the technology and technical assistance in the form of "troubleshooting" from Matamala during the start-up phases of production. IBRASOL has an exclusive license to manufacture and sell the final product in Brazil, but they will not be allowed to export.

The agreement is valid for five years, and has as one of the key features, a "*minimum revenue clause*". IBRASOL will pay to Matamala and the university, a royalty of 4% on sales of the products. Matamala and the university will split the revenue equally among themselves. The royalty will exclude the costs of packaging, which amounts to about 10% of the cost of production per unit. The Chilean parties will receive a minimum of USD 500,000 over the life of the agreement. Before the agreement is binding, it must be approved by INP - the Brazilian patent authority. Their role is to determine if the prices used in calculation of the cost structure are realistic, and also approve the transfer of funds from IBRASOL to the Chileans.

The patent for the technology has been filed in Chile and Brazil, with plans to file in other countries. A patent provides legal protection for any product or process that is new, useful and not obvious, and thereby allow researchers to recover their investments by exploiting the process without competition, or licensing the process to a second party. Information contained in the patent application can be read by anybody, it just cannot be used. Once the patent has expired the information can be used freely. Licensing of a patent means that a second party can use information previously monopolized by the patent holder. Normally the owner of the patent receives revenues based on sales of the final product, called a "royalty". If a license is "exclusive", then only the second party will be able to exploit the invention.

Robert Rowe, former Senior Program Officer in the EES Division, has been involved with this project since its inception. According to him, two main factors contributed to the success of the research--the product vision and practical orientation of Matamala, and the technical support and analysis given by Walter Smeltzer at McMaster University.

There are some obstacles to the commercial application of anticorrosive technology.

will enable awardees to see stories that normally would not be detected or receive coverage, and to view international development issues from a broader perspective. Through the professional internship with the development news agency, writing and editing skills are also enhanced.

As well as transferring new learning to their work in Canada, it is also important that the young journalists develop the credibility to have influence at the editorial level, and eventually serve on editorial boards themselves. At this point, eight years after the award's inception, several former recipients are well-placed in Canadian journalistic circles.

Conceived in 1983, the Gemini Award emerged as a separate award out of the Young Canadian Researchers Program administered by the Fellowships and Awards Division (FAD). A special review and planning process now underway will ultimately result in a revised award program in development journalism.

Clearly this is not a proven product. The existing market is small, and the needs are served through imported anticorrosive products. In order for the company to exploit the licensed technology and penetrate the market, they will have to address questions of production structure in relation to current rate of paint consumption in Brazil, government regulations, development of reliable supply networks and transportation, quality control, packaging and labelling, pricing policy, marketing and distribution.



Fahmy: 'Is the technology really as good as we think it is?'

It appears that IBRASOL is prepared to accept this risk. Salama Fahmy maintains that risk assessment is crucial if one is attempting to create a market niche. It is essential to validate the technology - "Is it really as good as we think it is?". He suggests that IBRASOL contact the British Technology Group, a private organization reputed for giving advice on technology licensing. In some parts of the Centre, there is a preference for selecting a Canadian company to validate the technology, but few exist that have the necessary experience. Validation could become tricky for IBRASOL, given the number of multinational companies interested in obtaining the same technology.

For IBRASOL and the IDRC-supported research institutions, the post-research experience could be very much like entering a minefield. IBRASOL is confident, however, that they will be successful with the development of the new product lines - certainly their horizons have been expanded. Moreover, consumers of IBRASOL paints will now have added benefits to the product. Jim Mullin, Vice-President, Program feels this project demonstrates that IDRC-supported research can, in fact, be of interest to the private sector. The twist is that income and employment generation have been stimulated in Brazil, even though the research was conducted in Chile. Of importance here, he states, is that the technology transfer agreement "holds out the possibility of generating revenue for research institutions in developing countries that are starved for funds."

Stubbing out his last cigarette, Salama looked up and said "Many actors, both in IDRC and Latin America, have contributed to the success of the project to this point." The technology transfer contract is but one step in the process of commercialization of research results. Success downstream will need to be subject to the test of time.

### NEXT ISSUE:

'The Norplant Controversy'--Invasive birth control raises serious socio-medical questions

And More.....

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