In the July, 1985 issue of the ITEST Bulletin the ITEST Director wrote: “December of this year marks the commemoration of the 20th anniversary of Vatican II’s Constitution on the Church in the Modern World (Gaudium et Spes). In that Constitution it was stated: “Individual and collective activity, that monumental effort of man through the centuries to improve the circumstances of the world, presents no problem to believers: considered in itself, it corresponds to the plan of God. Man was created in God’s image and was commanded to conquer the earth with all it contains and to rule the world in justice and holiness: he was to acknowledge God as maker of all things and relate himself and the totality of creation to him, so that through the dominion of all things by man the name of God would be majestic in all the earth.”

“In 1965 this was a major magisterial statement on science and technology. In view of the tremendous spurt in the life sciences, life technologies, and life industries since then, is this conciliar statement still appropriate? If anyone of you would care to write a brief, updated critique on the Council’s treatment of science and technology, in view of the present situation, we would be pleased to consider it for publication . . . .”

Professor Morren responded and his critique was published in the September - November, 1985 issue of the ITEST Bulletin. At the end of this year we shall be celebrating the 30th anniversary of this conciliar document. The editorial board thought it appropriate to reprint Professor Morren’s 1985 contribution.
In the editorial of the ITEST Bulletin of July 1985, after having quoted as an example a passage of *Gaudium et Spes* referred to as “a major magisterial statement on science and technology,” our Director puts the question: “In view of the tremendous spurt in the life sciences, life technologies and life industries since then, is this conciliar statement still appropriate?” He invites us to react.

Surely, during these last twenty years, the progress made in biology and in the associated sciences and technologies are tremendous. But even if they have a great impact on our present lives, we have some doubts whether, rewritten today, the *Pastoral Constitution on the Church in the Modern World* would substantially differ from its original version. For the standpoint adopted for describing the cultural and pastoral role of science and technology is a global one and the recent scientific developments only stress even more such a role. Moreover, we should also pay attention to other recent advances; namely, the developments of computer science which have such a large impact on labour conditions but not only on our social life. For instance, the debates over “artificial intelligence” have sometimes led to a renewed form of “scientism,” reducing man to a mere mechanism. But computers, even sophisticated ones, handle symbols and words and not intricate meanings!

In spite of these changes, our opinion is that *Gaudium et Spes* does not suffer from obsolescence. Its influence has been and continues to be important while the picture of our modern world and culture and the associate religious considerations to be found in it always deserve to be read. This is particularly true for the scientist referring to his own activities and his religious outlook.

It happened that, soon after the promulgation of the Constitution, we were asked by the editors of the “*Nouvelle Revue Theologique*” to write an article on science in *Gaudium et Spes*. It appeared under the (French) title “La Constitution Pastorale ‘L’Église dans le Monde de ce Temps’ et la Science” in issue No. 8, September-October 1966, Vol. 88, pp. 830-847.

It’s impossible here to translate these 18 pages into English! But, perhaps, some considerations about the place of science and technology in the Constitution, mostly derived from this paper, might be deemed relevant in the present context.

Never had the Church bestowed such an interest on science and technology in an official document. In this respect, *Gaudium et Spes* marks a turning point. Scientists will be pleased that the document affirms:

- the value of science and technology,
- their belonging to human vocation,
- their legitimate autonomy (only restricted by the respect for the ethical order - here bioengineering is increasingly involved),
- their powerful impact on culture.

After a foreword and preliminary considerations, the Constitution is divided into two parts. In the first one, “The Church and human vocation,” references to science are to be found in all of its four chapters. In the second part, devoted to some particular problems, they are on the contrary practically concentrated in Chapter II, “The proper development of culture.” There, some of the most important declarations are contained; namely, those on the autonomy of the sciences and on the pastoral implications of the relations between culture and Christianity.

The predominantly positive appreciation of the scientific development does not mean, of course, a naive attitude. We live in a sinful world and thus, any human richness is ambivalent. Science may be badly used and frequently exerts a materialistic pressure which is one of the major causes of atheism in the present world, an action, however, which is nowadays partially balanced by a better conscience of its own limits. (This is true, generally speaking, in spite of what was just said above about artificial intelligence).
Rather than pointing out the various qualities of the document, it may be more appropriate to address questions where further developments might have been desirable, at least for a Christian scientist.

Regarding the impact of science and technology on human life, the position taken seems too timid. Scientific progress is mainly seen as means for improving the quality of life, for providing more favourable conditions of life. This is true but insufficient, since technological advances are nowadays absolutely required simply for enabling a great proportion of humanity to live. Should we return to the age of the ox-cart and of the pirogue, with an agriculture ignoring chemical fertilizers and other technical means, we should condemn the majority of humans to death by starvation. Many similar examples might be mentioned. Thus scientific and technological developments constitute a necessary service to mankind, to our neighbours, in the fullest sense. Surely, this service is accompanied by evils. The gap between rich and poor countries has been disastrously increased during the last twenty years and a new edition of the Constitution would stress this fact. Simultaneously, scientific progress has also led to more terrible weapons. These two phenomena are not independent since the monstrous expenses for armaments disastrously restrict the funds for development. We again face the fundamental ambivalence of scientific and technological progress: they are together major agents of more efficient charity, enabling people to live, and major agents of destruction and death.

Regarding the impact of science and technology on the religious life, there are in Gaudium et Spes many excellent considerations on the harmony to be secured between culture and Christianity. One is presently conscious of living in a dynamic instead of a static world. This requires a continuous adaptation of the presentation of the Christian message to cultural changes. Here we recognize that the document is fundamentally a pastoral Constitution. But, as a Christian scientist, we would have liked to find more emphasis placed on the impact of science on our understanding of the biblical message; we should even speak of purification.

The complete renewal of our vision of the universe compels us to harmonize the truths of the Revelation and the truths disclosed in nature. A huge task! The traditional vision was “fixist”; ours is now dominated by the concept of generalized evolution for the whole cosmos; regarding time, the religious attention is focused on the few thousands years of Judeo-christian history while we presently know that the process of hominisation extends over millions of years and that the age of the universe is to be expressed in billions of years; regarding space, we now know that our earth is orbiting around a star of medium size among hundreds of billions of other stars in our galaxy which is itself lost among billions of other galaxies.

Surely, such a transition does not go without serious difficulties. We still have the so-called “creationists” opposed to evolution. And history reminds us about the conflicts which the ideas of Copernicus and Galileo had to survive: our earth was seen as the centre of the universe since it was on it that Christ, the Incarnation of the Son of God, of the Creator of the universe, was born. And St. Paul, in his epistles to the Colossians and to the Ephesians, awards to Christ a cosmic sovereignty. Finally, geocentrism was nevertheless abandoned. The present vision of the universe, opening the possibility of other conscious beings somewhere in space and time, puts to us a new question: should we as well abandon any geoprimacy? For, if the theologian has spontaneously a vision of singularity, the scientist thinks spontaneously in the category of plurality. Anyway, the surest theological principle seems to never restrict God’s freedom! And His freedom may lead either to the singularity of our case or to the plurality of similar ones. We shall discover the answer in the eschaton!