الأية :

عبدوا إلا إياه وبالوالدين إحسانا إما يبلغن عندك الكبر أحدهما أو كلاهما فلا تقل لهما أف ولا تنهرهما وقل لهما قولا كريما ﴿٢٣﴾ واخفض لهما جناح الذل من الرحمة وقل رب ارحمهما كما ربياني صغيرا ﴿٢٤﴾ ربكم أعلم بما في نفوسكم إن تكونوا صالحين فإنه كان للأوابين غفورا ﴿٢٥﴾ وآت ذا القربى حقه والمسكين وابن السبيل ولا تبذر تبذيرا ﴿٢٦﴾ إن المبذرين كانوا إخوان الشياطين وكان الشيطان لربه كفورا ﴿٢٧﴾ وإما تعرضن عنهم ابتغاء رحمة من ربك ترجوها فقل لهم قولا ميسورا ﴿٢٨﴾ ولا تجعل يدك مغلولة إلى عنقك ولا تبسطها كل البسط فتقعد ملوما محسورا ﴿٢٩﴾ إن ربك يبسط الرزق لمن يشاء ويقدر إنه كان بعباده خبيرا بصيرا ﴿٣٠﴾

SPECIAL DEDICATE:-

To my mother, to my father, the sheik and Prof.Dr.Ahmed Ali Alimam .Tom my brothers, and sisters I'm dedicating this research, to my wife who did not hesitate a moment for extending a help hand through the good initiatives, it was for her cooperating peerless that made me notice in many of the things that were hidden form me, for them the reward of the God and form me the better pray.

Thanks and gratitude

Science is the beacon of light up to show us creativity of the work of god, and his ability and wonders of his creation, and the science is the heirs of the Anbia had to flag reverence and appreciation for the students and from this door so I extend my sincere thanks and greate appreciation to my lecturer Mr. Dr. abuaaglah Babaker Mohammed for giving me his knowledge extremely from his precious time a wising direction that helped me to touch the right lines and the pages of the greate university and enriched his views and his proposal was the best way to facilitate my mission and the good prompt ,and the God guide credited to the appreace of the search of this image.

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Abstract:-

The Coriolis meters are considered as one of the most important meters to measure the flow rate as well as the density. However, a common complaint from petroleum companies is always rises regarding the accurate measurement of the delivered volume.

The lack of accurate measuring of volume is because of the effect of density and other external design factors, in this thesis, an analysis of the existing measuring system has been done, a newly design meter has been proposed and simulates using WinCC. The simulation results shows that the proposed design enhances the accuracy of the existing one, this enhancement has been done by the use of external Densometer to rectify the error in density measurement, which leads to enhancement of the accuracy in volume measurement. The control of density has been done by the addition of an external Densometer which introduces some amendments to the basic striation by added Densometer and modifying the software to be able to control the density in specific rang which is representation in the simulation. The result from proposed design agrees with the previous works regarding the effect of density in measuring the volume of petroleum product. Moreover, the readings of the enhanced meter show the impact of the amendments, to the performance of the meter, by reducing losses and gain in the result. Furthermore, the readings have been compared with the typical simulated design of the existing meter and it is promising.

المستخلص

تعتبر عدادات الكوريوليس من ادق العدادات المستخدم لقياس معدلات السريان والكثافة علي الرغم من ذلك فان هنالك بعض التساؤلات حول دقتها في القياس. ويعود عدم الدقة الي الكثافة وبعض الموثرات الخارجية التي تسبب فيها التصميم , في هذا البحث تم تحليل منظومة العدادات المستخدمة حاليا ومن ثم تقديم مقترح لتصميم جديد ثم تمثيله في نظام محاكا حيث اظهرت النتائج حدوث تحسن في اداء المنظومه من حيث دقه قياس الكثافه وهذا التحسن تم باضافة جهاز جديد لقياس الكثافه يعمل بطريقه مختلفة عن الطريقه التي يستخدمها العداد في قياسه للكثافه . التحكم في الكثافه تم باضافة جاهز الدينسوميتر ومن ثم تعديل برنامج التشغيل ليكون قادراً علي السيطرة علي الكثافه في مدي محدد وتمثيلها في نظام محاكاة بغرض معرفة أثر التعديلات المدخلة علي اداء العداد والتي تمثلت جليا في تقليل الفقودات في الكميات المارة عبر العداد بعد المقارنه مع النظام قبل التعديل .